

Acknowledgments

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Introduction- An Overview

Prevention is a central value of U. S. public health policy. The United States health care system, while offering the most technically advanced care in the world, fails to provide primary health care to individuals who are poor, remotely located from urban centers, or are facing other barriers to obtaining health care. Such individuals do get hospital care when their condition worsens to the extent that it is necessary to hospitalize them. For some patients and for some conditions, adequate and timely outpatient care could have prevented deterioration that led to more suffering for patients and greater cost to the health care system. Such conditions, for which hospitalization could have been prevented through timely and appropriate outpatient care, are called *ambulatory care sensitive conditions* or *preventable hospitalizations* (1, 2).

Asthma is a good example of an ambulatory care sensitive (ACS) condition. Treatment for asthma has improved substantially over the past decade and patients who receive appropriate outpatient care should rarely worsen to the point that hospitalization is needed. Not all such hospitalizations can be prevented by improving access to and quality of care, but observing a high hospitalization rate in a community should prompt an examination of the factors contributing to the high rate.

Establishing a cost effective health care delivery system and continuously improving it is one of the principal goals of Utah Department of Health. Achievement of that goal can be furthered by timely and useful health care information and analysis. The analysis of hospital discharges for ACS conditions will help assess the relative effectiveness of health care delivery systems in each small area as well as in Utah, and will guide policy makers in targeting and planning the appropriate interventions. These utilization data can complement analyses based exclusively on supply factors such as physician-to-population ratios or expenditures for primary care in a given area.

The issue of access can be adequately assessed when rates of hospital admissions for ACS conditions are computed for geographic units of optimum size— large enough to produce stable rates, but small enough to be useful for community-level planning. Areas should also be homogenous in socioeconomic status and other determinants of health and health care utilization, so that disparities are not obscured. Most of the Utah Department of Health reports have used local health districts or counties for geographic analyses. Especially in more heavily populated areas, county level analyses can fail to identify smaller areas of substantial need. This report takes geographic analyses of health care utilization a step further by presenting data on 61 small areas in Utah.

Maps are a powerful way of visually presenting small area geographic variation in rates. Variation in rates of ACS conditions among small areas indicates variation of health care access at the community level. This report examines rates for 12 ACS conditions in Utah. The rates have been calculated for Utah's 61 small areas (See Key Map #1, page 15; Table 3, page 13), to allow comparisons among those areas and between each small area and the overall state rates. The Wasatch Front contained 44 of the small areas with the other 17 areas located in rural counties.

The average 1997 population size for these small areas was 33,500 persons (range from 15,000 to 62,500 persons). Sometimes ZIP codes or counties were used individually, at other times contiguous areas were combined. Population size, political boundaries of cities and towns, and economic similarity were the chief criteria used to combine the areas. A complete list of area definitions (ZIP codes and

county combinations were used to create each area) is given in Table 3. A detailed description of the methodology used to designate small area boundaries may be found in the Technical Appendix of an earlier report (8).

These data can be used in at least two ways. First, when rates for one or more ACS conditions are high in an area, that finding should prompt an examination of access to quality outpatient medical care for people living in that area. This examination might focus on the availability and accessibility of primary care providers, as well as on whether people can afford to see those providers.

A second way to use this information is to focus on the care systems for specific conditions. For example, high hospitalization rates for asthma in an area might prompt an examination of outpatient care for patients with asthma. This examination might include an assessment of primary care providers' knowledge of current asthma treatment, of case-management services for such patients, or of arrangements to assure continuity of care for patients seen in emergency departments or urgent care settings. Such an examination might use a quality improvement team composed of clinicians and others involved in the care of such patients.

The report begins with an executive summary that contains the highlights of the findings of the report and the overall ranking of each small area when compared to the state rate for each of the 12 conditions (See pages 1-5). The number of preventable hospitalizations and charges that could have been avoided is shown in Table 2.

The next section contains small area boundary designations according to zip code; selected demographic measures such as population size and per capita income are listed (Table 3). Area numbers in Table 3 correspond to map numbers in the State view and the Wasatch view of small areas. This section concludes with a description and summary of each ambulatory care sensitive condition and specific rates for discharge, charge and length of stay for each condition.

The report then provides maps that depict rates of hospitalizations for ACS conditions by small area. For each condition, four maps are presented. The first two maps present rates for the ACS condition in broad ranges; one map is a view of Utah and the other of the Wasatch Front. The second two maps (also views of Utah and the Wasatch Front) indicate small areas in which values on the measure were higher or lower than the overall state value. An area was considered different from the state if the 95% confidence interval for the small area measure did not include the state rate. Following the maps are reference tables that list crude and adjusted discharge rates, annual charges and length of stay for each ACS condition in each small area.

The source of data and details about methods used to compute adjusted rates and their confidence intervals are presented in Appendix A. The classification of Ambulatory Care Sensitive Conditions and the ICD-9 discharge diagnosis codes used to identify them are given in Appendix B.

Highlights

Ambulatory care sensitive (ACS) conditions are illnesses that are “sensitive” to the kind of outpatient care received by people in communities. In most instances, ACS conditions can be managed outside of the hospital in “outpatient” facilities unless the condition has worsened to the point that hospitalization is needed. Lack of outpatient care causes unnecessary hospitalizations, poorer outcomes and greater cost to the individual and society.

Small area analysis can be used to focus on geographic areas small enough to be used as a tool for community planning, but large enough to produce reliable rates. The findings of the report are the following:

- After obstetric admissions and those for newborns were excluded, a total of 807,148 hospital admissions occurred in Utah during 1992-96. The 12 ACS conditions accounted for 86,633 or 10.7% of all hospitalizations (excluding those related to child birth) in 1992-96.
- Costs for hospitalization for these 12 ACS conditions totaled \$533 million over the 5 year period, 9.6% of all hospitalization charges for non-maternity hospital admissions.
- Among 12 ACS conditions, bacterial pneumonia was the most common cause of hospitalization, with rates of hospitalization nearly twice as high as for the second most common condition, congestive heart failure. The next most frequently occurring ACS conditions resulting in hospitalization, in descending order, were diabetes, asthma, dehydration, pyelonephritis/urinary infection, and perforated or bleeding ulcer.
- In 25 areas, one or more conditions occurred at a rate lower than the state rate and no condition occurred at a rate higher than the state rate. These data suggest that in those areas most people have good access to outpatient health care. In an additional 19 areas, only one or no ACS conditions occurred at a rate higher than the state rate. Access is probably good for most people in these areas also, though some attention should be given to the potential reasons for the single high rate condition (See Table 1).
- In 17 areas in Utah, at least two and up to nine conditions occurred at rates significantly above the state rate. These data suggest that a serious examination of potential problems with access is needed in those cases.
- Based on these data, problems with access existed in both urban and rural areas. Of the 17 areas that had 2 or more ACS conditions that rated higher than the state rate, 12 came from urban areas (constituting 27.3% of all urban areas) and 5 came from rural areas (constituting 29.4% of all rural areas).
- Urban areas with apparent access problems included Glendale and Rose Park in Salt Lake County and downtown Ogden (6, 4, and 3 conditions higher than state rate, respectively). Rural areas with evidence of access problems included Tri-county Health District, Other Southwest District, and Sevier/Piute/Wayne Counties (9, 6, and 3 conditions higher than state rate, respectively).

- Bacterial pneumonia, the leading cause of hospitalization among all ambulatory care sensitive conditions, causes significantly higher rates of hospital admissions in rural areas than those located in the Wasatch Front- the urban areas. Of the 17 areas outside the Wasatch Front, eight had rates significantly higher than state rates. In comparison, only eight of the 44 urban areas had rates higher than the state rate. Only two areas outside the Wasatch Front (Logan, Summit County) had significantly lower rates of bacterial pneumonia than the state rate.

- Table 2 shows the estimated number of preventable hospitalizations and charges for the 12 ACS conditions from 1992-1996. Each area is compared to the small area marking the lowest quartile for that ACS condition and excess discharges are noted for each of the 61 small areas. The estimated number of preventable hospitalizations for the 12 ACS conditions during 1992-96 was close to 24,000 cases. The total potential cost savings for preventable hospitalizations during the 5 years was almost \$147 million dollars.

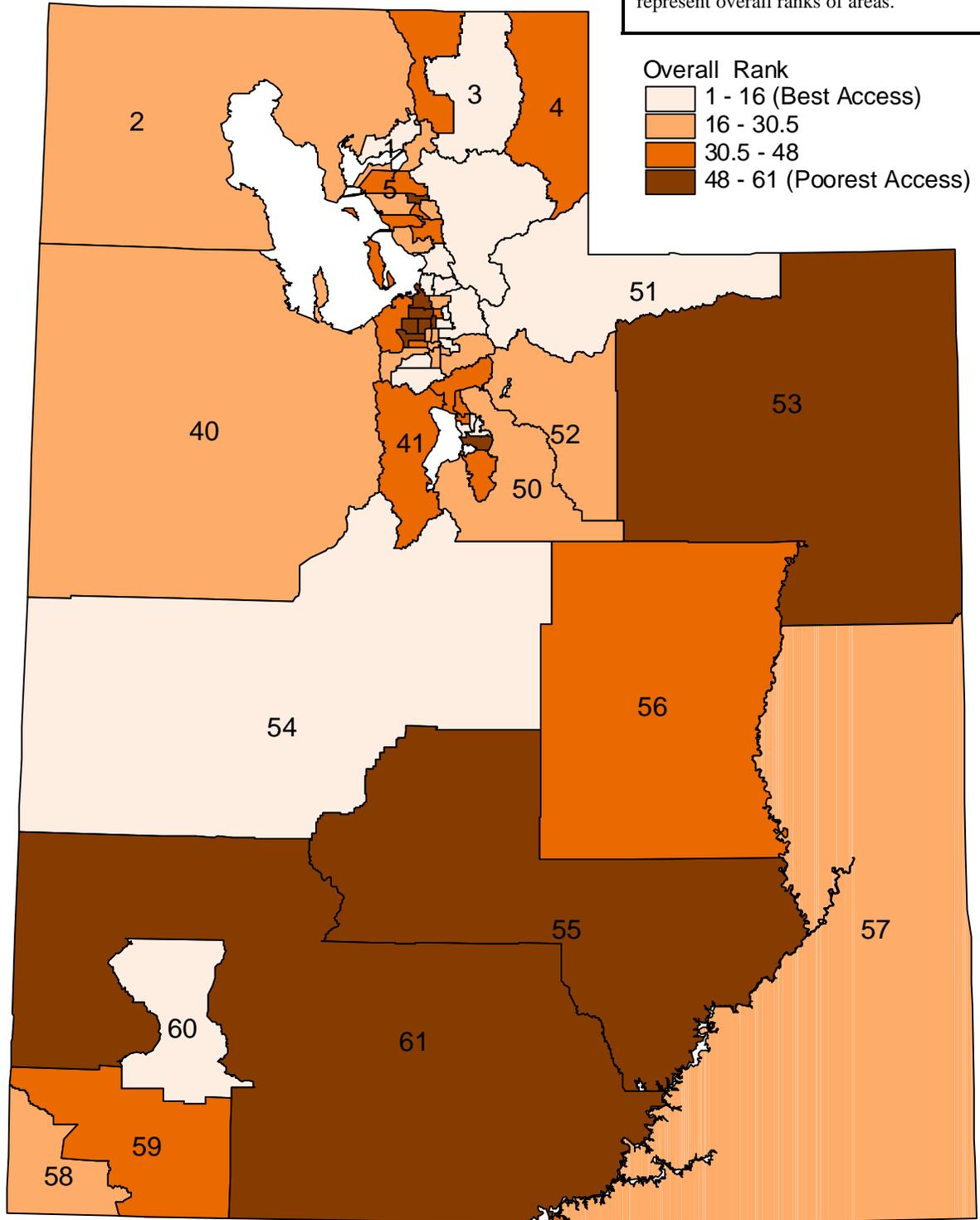
Table 1: Comparison of Hospitalization Rates (Age Adjusted) for Small Areas Indicating Whether They Were Significantly Lower Than State (indicated with a ▼), Not Different from State (indicated with a 0) or Higher than State (indicated with a ▲) for 12 Ambulatory Care Sensitive Conditions, Utah 1992-96

Area Number and Name	Bacterial Pneumonia	Congestive Heart Failure	Diabetes	Asthma	Dehydration	Pyelonephritis/Urinary Infection	Perforated or Bleeding Ulcer	Cellulitis	COPD	Angina	Appendicitis with rupture	Gastroenteritis	Sum of + (▲) and - (▼) codes
33 West Jordan No.	▲	0	0	0	0	0	0	0	0	▲	0	0	2
34 W. Jordan, Copperton	0	0	0	0	0	0	0	0	0	0	0	▼	-1
35 South Jordan	▼	▼	▼	▼	▼	▼	▼	0	▼	0	▼	▼	-10
36 Sandy Center	0	0	0	0	0	0	0	0	0	0	0	▼	-1
37 Sandy, NE	0	0	0	0	0	0	0	0	0	0	0	0	0
38 Sandy, SE	0	0	0	0	0	0	0	0	0	0	0	0	0
39 Riverton/Draper	0	0	0	0	0	0	0	0	0	0	0	0	0
40 Tooele Co.	0	0	0	0	▼	0	0	0	0	0	0	0	-1
41 Lehi/Cedar Valley	0	0	0	0	0	0	0	0	0	▲	0	0	1
42 American Fork/Alpine	0	0	0	0	0	0	0	0	0	▲	0	0	1
43 Pleasant Grove/Lindon	0	0	0	0	0	0	0	0	0	▲	0	0	1
44 North Orem	▲	▲	0	0	▲	0	▲	0	0	0	0	0	4
45 West Orem	0	0	0	0	0	0	0	0	0	0	0	0	0
46 East Orem	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	▼	-12
47 Provo/BYU	▼	0	▼	0	0	▼	0	0	▼	▼	0	▼	-6
48 Provo South	0	▲	0	0	▲	0	0	0	▲	0	0	0	3
49 Springville/Spanish Fork	▲	0	0	0	0	0	0	0	0	0	0	0	1
50 Utah Co. South	▲	0	▼	0	0	0	0	0	0	0	0	0	0
51 Summit Co.	▼	▼	0	▼	▼	0	0	0	▼	▼	0	0	-6
52 Wasatch Co.	0	0	0	▼	0	0	0	0	0	0	0	0	-1
53 Tri-county LHD	▲	▲	▲	▲	▲	▲	0	▲	▲	▲	0	0	9
54 Juab/Millard/Sanpete Co.	0	▼	▼	0	▼	0	▼	0	▼	0	▼	0	-6
55 Servier/Piute/Wayne Co.	▲	▲	0	▲	0	0	0	0	0	0	0	0	3
56 Carbon/Emery Co.	▲	0	0	0	0	0	0	0	0	▲	0	0	2
57 Grand/San Juan Co.	▲	0	0	0	0	0	▼	0	0	0	▼	▲	0
58 St. George	0	▼	0	0	0	0	0	0	0	0	0	0	-1
59 Other Washington Co	▲	0	0	0	0	0	0	0	0	0	0	0	1
60 Cedar City	0	▼	0	▼	▼	0	0	▼	▼	0	0	0	-5
61 Other Southwest Dist	▲	▲	0	0	▲	▲	0	▲	0	0	0	▲	6

* Note: If two or more areas were tied for a range of ranks, the average rank was assigned. For instance, the areas 3, 19, 60 had the same sum of + and - codes (i.e., -5) and were tied for the ranks 9, 10, 11. The average of these numbers, i.e. 10, was assigned as a rank to these three areas.

Overall Ranking of Small Areas, Utah 1992-96.

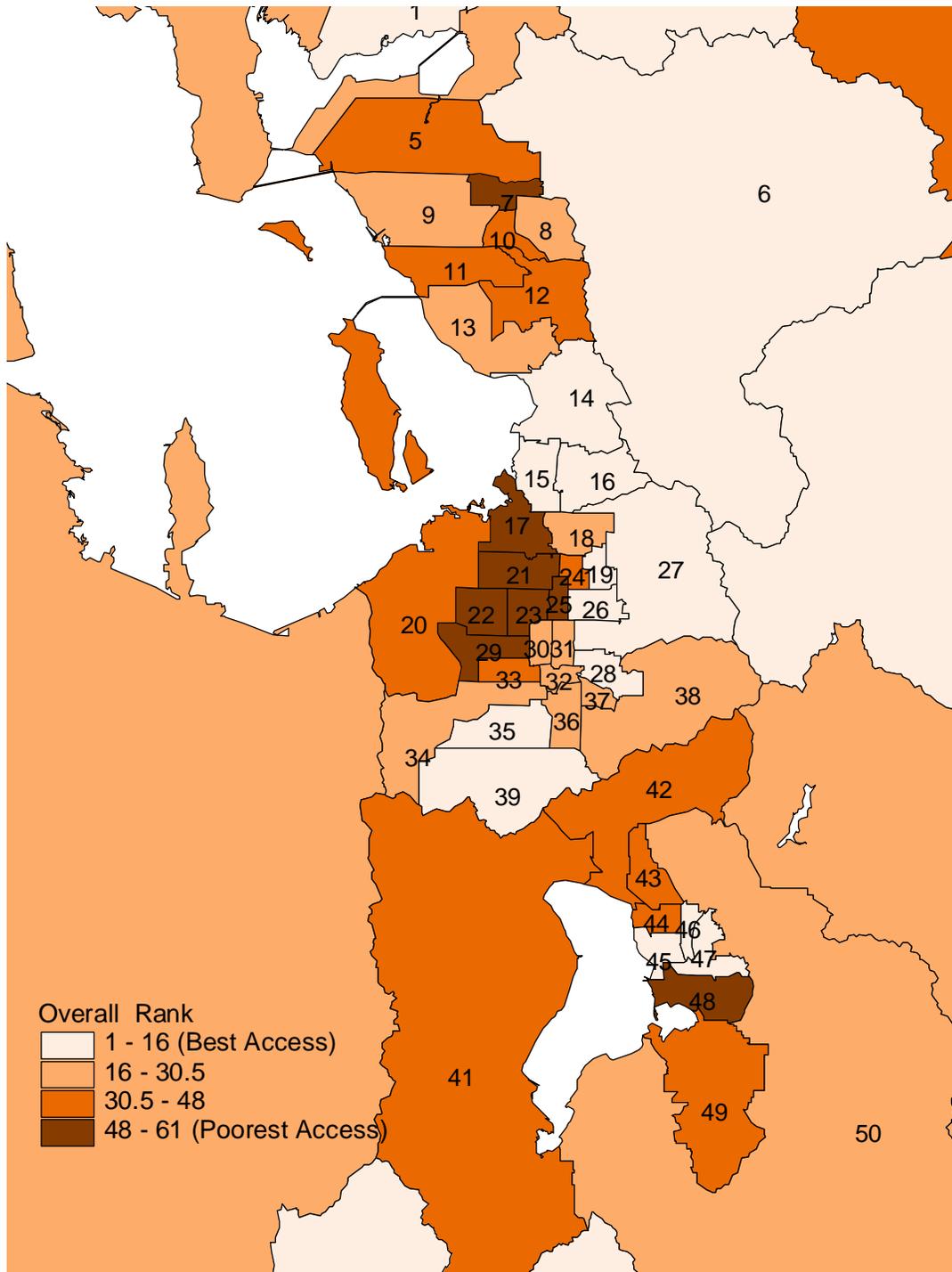
Numbers on map represent area labels (see Table 3 or list on back cover). The shadings represent overall ranks of areas.



Note: The overall ranking was established based on a number of conditions for which the rate for a small area was lower than state, no different than the state, or higher than the state. A score of “-1” was assigned if a rate was lower than the state rate, “0” if it was no different than state, and “1” if it was significantly higher than state. The scores were then added for all twelve conditions and a rank was assigned (rank 1 was assigned to the lowest score- meaning best access). This map reflects the ranks in broad ranges.

Overall Ranking of Small Areas, Utah Wasatch Front, 1992-96.

Numbers on map represent area labels (see Table 3 or list on back cover). The shadings represent overall ranks of areas.



Note: The overall ranking was established based on a number of conditions for which the rate for a small area was lower than the state, no different than the state, or higher than the state. A score of “-1” was assigned if a rate was lower than the state rate, “0” if it was no different than state, and “1” if it was significantly higher than state. The scores were then added for all twelve conditions and a rank was assigned (rank 1 assigned to lowest score-- meaning best access). This map reflects the ranks in broad ranges.

Table 3: Small Area Boundary Designations and Selected Demographic Measures

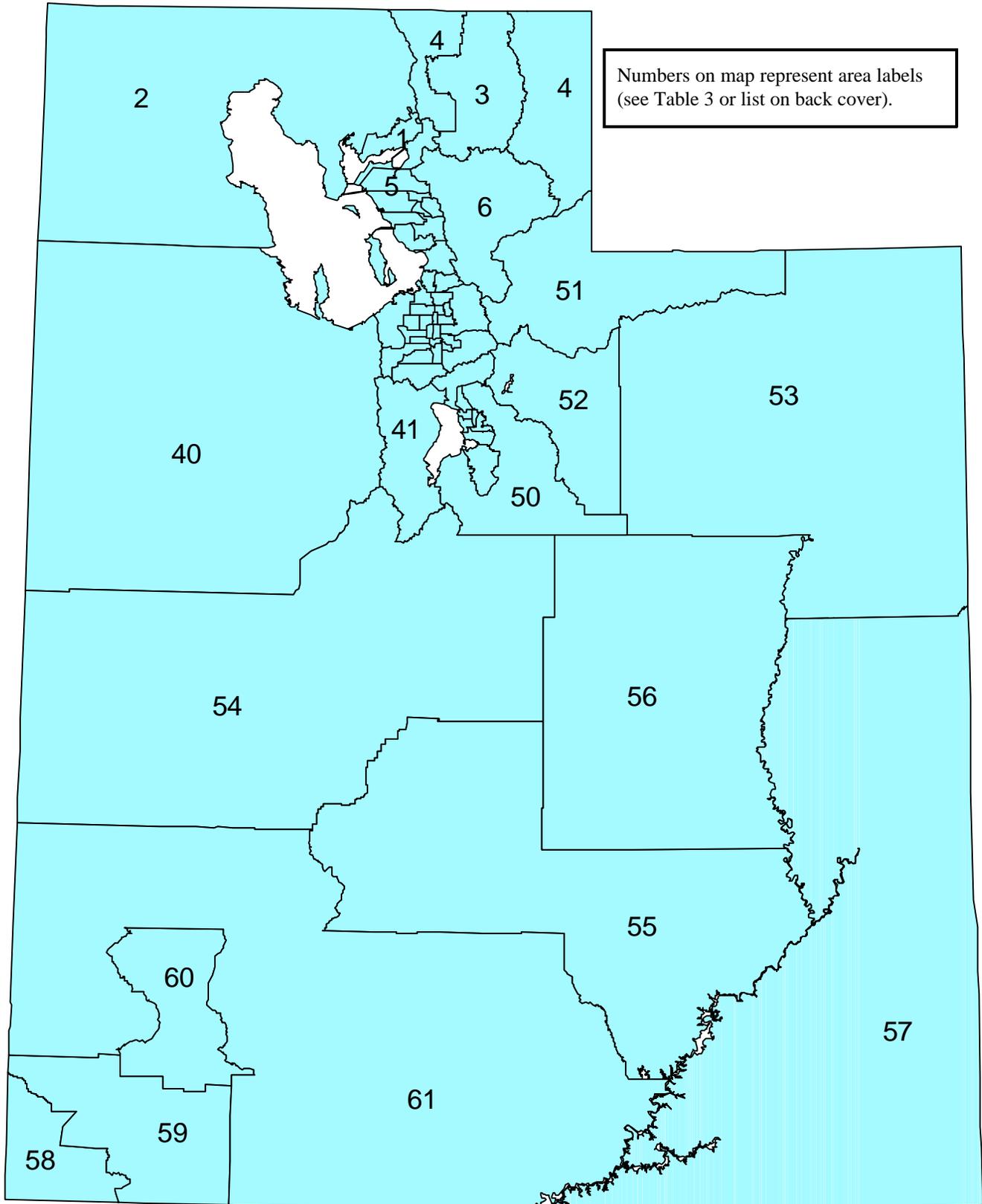
Area of Residence		Boundary Designation	Population Size ¹	Per Capita Income ¹	Median Age ¹
No.	Name				
0	State Total	All counties / ZIP codes in Utah	2,042,003	\$14,045	28
1	Brigham City	ZIP code 84302	18,915	\$14,867	30
2	Other Box Elder Co.	Box Elder County except ZIP code 84302	20,712	\$13,231	27
3	Logan	ZIP codes 84321, 84322, 84341, 84332	60,515	\$13,006	24
4	Other Cache/Rich	Cache & Rich Co. except ZIP codes 84321,	26,325	\$11,769	26
5	Ben Lomond	ZIP codes 84404, 84407, 84412	39,592	\$13,151	30
6	Morgan/East Weber Co.	ZIP codes 84310, 84317, 84414, 84050 or Morgan County	32,686	\$14,757	28
7	Downtown Ogden	ZIP codes 84401, 84402	24,663	\$12,484	31
8	South Ogden	ZIP code 84403	30,696	\$18,185	33
9	Roy/Hooper	ZIP codes 84067, 84315	36,276	\$14,404	28
10	Riverdale	ZIP codes 84405, 84409	23,783	\$15,443	31
11	Clearfield/Hill AFB	ZIP codes 84015, 84016, 84056	45,593	\$11,592	24
12	Layton	ZIP codes 84040, 84041	53,648	\$14,465	26
13	Syracuse/Kaysville	ZIP codes 84037, 84075	29,312	\$14,029	25
14	Farmington/Centerville	ZIP codes 84025, 84014	24,991	\$14,948	24
15	Woods Cross/No SL	ZIP codes 84087, 84054	17,596	\$13,972	25
16	Bountiful	ZIP codes 84010, 84011	44,309	\$17,141	30
17	Rose Park	ZIP code 84116	26,083	\$12,871	30
18	Avenues	ZIP codes 84103, 84114	23,277	\$23,110	35
19	Foothill/U of U	ZIP codes 84108, 84112, 84113	22,917	\$23,761	35
20	Magna	ZIP code 84044	20,128	\$11,315	25
21	Glendale	ZIP codes 84104, 84101, 84110, 84152	20,579	\$11,133	32
22	West Valley I	ZIP codes 84128, 84120, 84170	58,179	\$11,989	25
23	West Valley II	ZIP codes 84119, 84199	40,174	\$12,773	27
24	Downtown Salt Lake	ZIP codes 84111, 84102, 84105	48,215	\$16,691	33
25	South Salt Lake	ZIP codes 84115, 84165	22,416	\$12,582	31
26	Millcreek	ZIP codes 84106, 84151, 84109	55,943	\$18,385	36
27	Holladay	ZIP codes 84124, 84117	46,584	\$21,967	37
28	Cottonwood	ZIP codes 84121	45,933	\$20,675	33
29	Kearns	Zip code 84118	62,462	\$12,057	25
30	Taylorsville	ZIP code 84123	33,294	\$15,877	29
31	Murray	ZIP codes 84107, 84157	30,139	\$17,764	33
32	Midvale	ZIP code 84047	27,154	\$14,959	29
33	West Jordan No.	ZIP code 84084	44,308	\$12,100	22
34	W. Jordan, Copperton	ZIP codes 84088, 84006	28,860	\$12,170	24
35	South Jordan	ZIP code 84095	32,401	\$13,936	24

Table 3: Small Area Boundary Designations and Selected Demographic Measures

Area of Residence No.	Name	Boundary Designation	Population Size	Per Capita Income ¹	Median Age ¹
36	Sandy Center	ZIP codes 84070, 84091, 84094	52,784	\$14,260	27
37	Sandy, NE	ZIP codes 84093, 84090	28,948	\$19,615	28
38	Sandy, SE	ZIP code 84092	34,139	\$19,391	25
39	Riverton/Draper	ZIP codes 84065, 84020	37,651	\$12,542	27
40	Tooele Co.	Tooele County	30,371	\$11,953	30
41	Lehi/Cedar Valley	ZIP codes 84043, 84013	14,951	\$11,875	25
42	American Fork/Alpine	ZIP codes 84004, 84003	34,378	\$12,285	24
43	Pleasant Grove/Lindon	ZIP codes 84062, 84042	26,294	\$11,827	23
44	North Orem	ZIP codes 84057, 84059	35,107	\$12,406	23
45	West Orem	ZIP code 84058	27,114	\$12,735	23
46	East Orem	ZIP code 84097	30,579	\$13,712	24
47	Provo/BYU	ZIP codes 84602, 84604	47,328	\$12,581	22
48	Provo South	ZIP codes 84601, 84603, 84605, 84606	47,650	\$9,795	24
49	Springville/Spanish Fork	ZIP codes 84660, 84663, 84664, 84653	44,774	\$12,283	25
50	Utah Co. South	ZIP codes 84651, 84655, 84626, 84633	19,920	\$10,539	24
51	Summit Co.	Summit County	25,301	\$21,809	33
52	Wasatch Co.	Wasatch County	12,441	\$13,616	29
53	Tri-county LHD	Daggett, Duchesne and Uintah Counties	39,334	\$10,055	27
54	Juab/Millard/Sanpete Co.	Juab, Millard, and Sanpete Counties	39,473	\$9,144	29
55	Sevier/Piute/Wayne Co.	Piute, Sevier, and Wayne Counties	21,373	\$10,126	32
56	Carbon/Emery Co.	Carbon and Emery Counties	31,108	\$11,257	31
57	Grand/San Juan Co.	Grand and San Juan Counties	21,083	\$9,333	29
58	St. George	ZIP codes 84770, 84771, 84790	51,395	\$13,574	30
59	Other Washington Co.	Washington County except ZIP codes 84770, 84771, 84790	26,263	\$10,123	29
60	Cedar City	ZIP code 84720	24,424	\$11,485	25
61	Other Southwest Dist.	Beaver, Garfield, Iron, and Kane Counties other than ZIP code	19,162	\$10,571	34

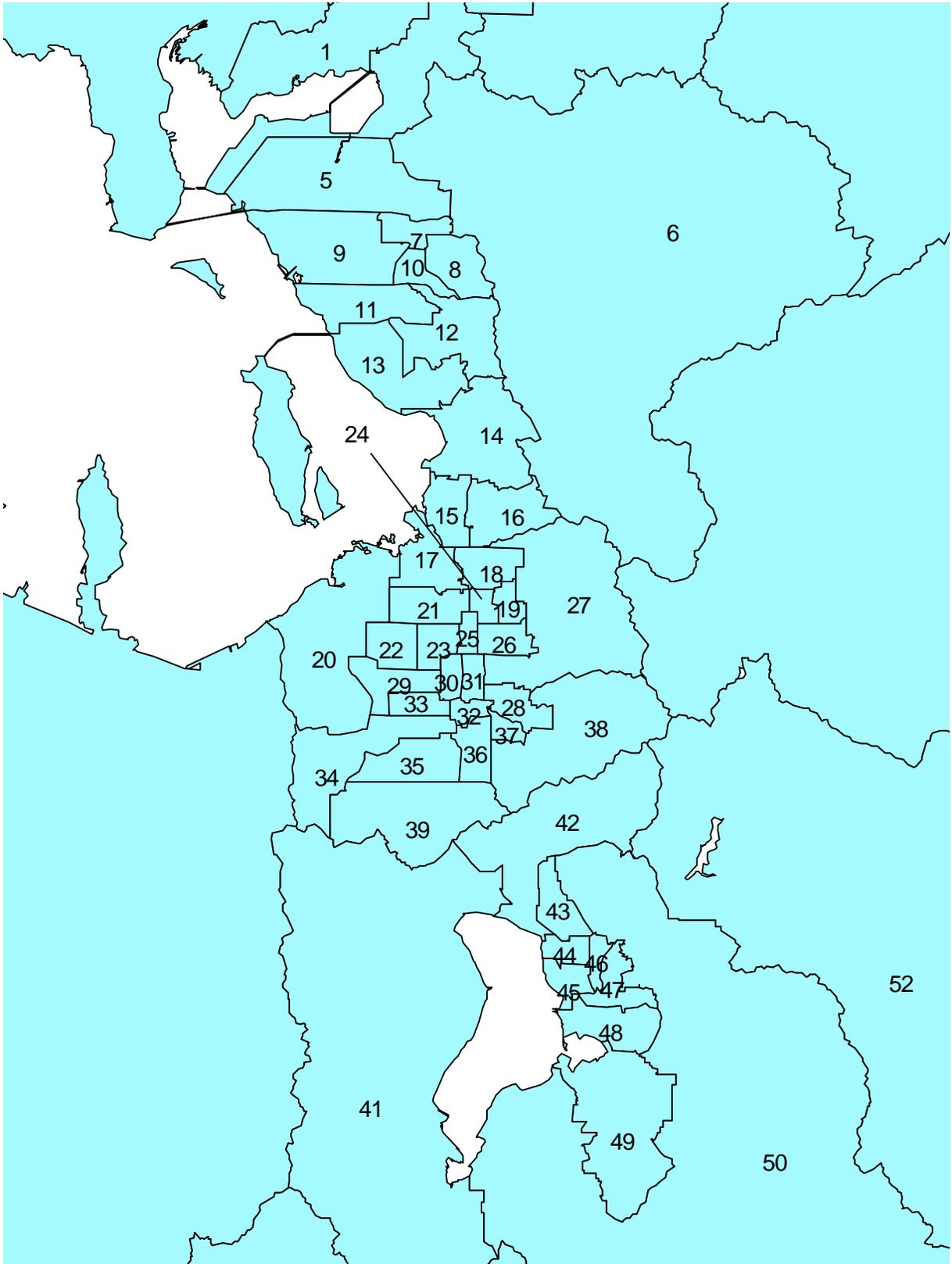
¹Population estimates are for 1997. Age and per capita income figures are means, weighted by population count of the ZIP code median values. Source: CACI Marketing Systems, Inc. La Jolla, CA.

Key Map #1: State View of Small Areas:



Key Map #2: Wasatch View of Small Areas:

Numbers on map represent area labels (see Table 3 or list on back cover).



Description of Ambulatory Care Sensitive (ACS) Conditions

Bacterial pneumonia

Bacterial pneumonia is a serious lung infection that can be caused by several different bacteria (a type of germ). In some cases, if appropriate antibiotic therapy is provided early in the course of treatment, hospitalization can be prevented. For patients at high risk, two vaccinations can help prevent pneumonia.⁵ Pneumococcal vaccine is recommended for all immunocompetent individuals age 65 and over and for selected others at high risk. Influenza vaccine is recommended annually for all persons age 65 and older and for persons age 6 months and older with selected conditions that place them at high risk.

Average annual number of bacterial pneumonia discharges from 1992-96 in Utah - 4,633 per year

Rate of bacterial pneumonia discharges from 1992-96 in Utah - 24.2 per 10,000 persons per year

Total charges for bacterial pneumonia discharges from 1992-96 in Utah - \$36,528,021 per year

Average total charge per discharge - \$8,148

Average length of stay - 5.44 days

Average annual number and rate of discharges by sex and age for bacterial pneumonia, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	2,384	25.0
Female	2,249	23.4
<15 years	955	17.2
15-44 years	660	7.3
45-64 years	690	24.0
65+ years	2,328	139.1

Congestive Heart Failure

Congestive heart failure is a chronic heart condition that occurs when the heart muscle is damaged by a heart attack, chronic high blood pressure, or other causes. The risk of congestive heart failure can be reduced by good control of high blood pressure. In addition, several new treatments are available for congestive heart failure, and many hospitalizations can be prevented by appropriate outpatient medical care for patients who have developed congestive heart failure.

Average annual number of congestive heart failure discharges from 1992-96 in Utah - 2,221 per year

Rate of congestive heart failure discharges from 1992-96 in Utah - 11.6 per 10,000 persons per year

Total charges for congestive heart failure discharges from 1992-96 in Utah - \$14,628,341 per year

Average total charge per discharge - \$7,005

Average length of stay - 5.50 days

Average annual number and rate of discharges by sex and age for congestive heart failure, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	1,104	11.6
Female	1,117	11.6
<15 years	18	0.3
15-44 years	56	0.6
45-64 years	366	12.7
65+ years	1,781	106.4

Diabetes

Diabetes is a chronic condition that occurs when the body is unable to produce enough insulin or develops resistance to the action of insulin. Many of its complications can be prevented by appropriate medical care and self-management. Acute metabolic complications of diabetes, refer to serious increases or decreases in blood sugar. Such complications can be life threatening when they occur and often require hospitalization, but can often be prevented if appropriate medical care is provided in a timely manner. The American Diabetes Association has released standards of care for persons with diabetes that, if followed, should reduce the frequency of these hospitalizations.⁶

Average annual number of diabetes discharges from 1992-96 in Utah - 1,659 per year
 Rate of diabetes discharges from 1992-96 in Utah - 8.7 per 10,000 persons per year
 Total charges for diabetes discharges from 1992-96 in Utah - \$11,311,683 per year
 Average total charge per discharge - \$7,139
 Average length of stay - 4.81 days

Average annual number and rate of discharges by sex and age for diabetes, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	811	8.5
Female	848	8.8
<15 years	201	3.6
15-44 years	633	7.0
45-64 years	385	13.4
65+ years	440	26.3

Asthma

Asthma is a chronic respiratory condition characterized by reversible airway obstruction. While not all hospitalizations for asthma are preventable, many can be prevented if persons with asthma have good access to outpatient care that includes appropriate medical management, prompt attention to worsening airway obstruction, appropriate emergency department care, and attention to a patient's self-management ability.

The National Asthma Education and Prevention Program recently released new guidelines for

management of asthma.⁷

Average annual number of asthma discharges from 1992-96 in Utah - 1,463 per year
Rate of asthma discharges from 1992-96 in Utah - 7.6 per 10,000 persons per year
Total charges for asthma discharges from 1992-96 in Utah - \$6,081,457 per year
Average total charge per discharge- \$4,260
Average length of stay - 3.16 days

Average annual number and rate of discharges by sex and age for asthma, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	639	6.7
Female	824	8.6
<15 years	659	11.9
15-44 years	365	4.0
45-64 years	220	7.7
65+ years	218	13.0

Dehydration

Dehydration refers to a loss of fluid resulting from vomiting, diarrhea, inability to eat, or other problems. In some cases, prompt medical care can effectively treat the underlying conditions. In others, dehydration severe enough to require hospitalization can be prevented by assuring that the person receives adequate fluid intake.

Average annual number of dehydration discharges from 1992-96 in Utah - 1,413 per year
Rate of dehydration discharges from 1992-96 in Utah - 7.4 per 10,000 per year
Total charges for dehydration from 1992-96 in Utah - \$4,694,653 per year
Average total charge per discharge - \$3,425
Average length of stay - 3.10 days

Average annual number and rate of discharges by sex and age for dehydration, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	616	6.5
Female	797	8.3
<15 years	569	10.2
15-44 years	229	2.5
45-64 years	153	5.3
65+ years	462	27.6

Pyelonephritis/Urinary Infection

Pyelonephritis (PUI) is a serious infection of the kidney and urinary tract. It usually results from an untreated infection of the bladder, sometimes in the presence of a complicating factor such as

pregnancy, urinary tract obstruction, diabetes, or polycystic kidney disease. It can be prevented by prompt and effective treatment of bladder infections and in some cases by regular testing to detect infection.

Average annual number of PUI discharges from 1992-96 in Utah - 1,324 per year
 Rate of PUI discharges from 1992-96 in Utah - 6.9 per 10,000 persons per year
 Total charges for PUI discharges from 1992-96 in Utah - \$5,533,518 per year
 Average total charge per discharge - \$4,349
 Average length of stay - 3.82 days

Average annual number and rate of discharges by sex and age for pyelonephritis/urinary infection, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	363	3.8
Female	960	10.0
<15 years	240	4.3
15-44 years	372	4.1
45-64 years	179	6.2
65+ years	533	31.8

Perforated or bleeding ulcer

An ulcer is an erosion, or “hole,” in the lining of the stomach or duodenum. In most cases, an ulcer results in abdominal pain and can be effectively treated. If not properly treated, an ulcer can cause bleeding or can extend completely through the wall of the stomach or duodenum (perforated ulcer). These complications can be life-threatening as well as requiring expensive hospital care. In recent years, several new and very effective treatments have been developed that relieve symptoms, heal ulcers, and prevent complications and recurrences.

Average annual number of perforated or bleeding ulcer discharges from 1992-96 in Utah - 987 per year
 Rate of perforated or bleeding ulcer discharges from 1992-96 in Utah - 5.2 per 10,000 persons per year
 Total charges for perforated or bleeding ulcer discharges from 1992-96 in Utah - \$8,784,060 per year
 Average total charge per discharge - \$9,343
 Average length of stay - 5.00 days

Average annual number and rate of discharges by sex and age for perforated or bleeding ulcer, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	571	6.0
Female	416	4.3
<15 years	3	0.0
15-44 years	154	1.7
45-64 years	266	9.3
65+ years	564	33.7

Cellulitis

Cellulitis is an infection of the subcutaneous (under the skin) tissue. Cellulitis severe enough to require hospitalization often begins as a minor skin infection that could have been controlled by prompt treatment.

Average annual number of cellulitis discharges from 1992-96 in Utah - 874 per year

Rate of cellulitis discharges from 1992-96 in Utah - 4.6 per 10,000 persons per year

Total charges for cellulitis discharges from 1992-96 in Utah - \$3,331,799 per year

Average total charge per discharge - \$4,082

Average length of stay - 4.13 days

Average annual number and rate of discharges by sex and age for cellulitis, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	480	5.0
Female	394	4.1
<15 years	139	2.5
15-44 years	258	2.9
45-64 years	200	7.0
65+ years	278	16.6

Chronic obstructive pulmonary disease

Chronic obstructive pulmonary disease (COPD) includes several conditions (e.g., chronic bronchitis, and emphysema) characterized by airway obstruction. It may include some reversible and some fixed obstruction. Some hospitalizations can be prevented by prompt treatment of respiratory infections. Annual influenza vaccination and pneumococcal vaccine (see discussion of bacterial pneumonia) can prevent some infections that lead to hospitalization of persons with COPD.

Average annual number of COPD discharges from 1992-96 in Utah - 831 per year

Rate of COPD discharges from 1992-96 in Utah - 4.3 per 10,000 per year

Total charges for COPD discharges from 1992-96 in Utah - \$5,435,532 per year

Average total charge per discharge - \$7,535

Average length of stay - 5.74 days

Average annual number and rate of discharges by sex and age for chronic obstructive pulmonary disease, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	479	5.0
Female	351	3.7
<15 years	11	0.2
15-44 years	39	0.4
45-64 years	242	8.4
65+ years	539	32.2

Angina

Angina refers to chest pain that is caused by the heart receiving an inadequate blood supply. It is usually caused by coronary artery disease. Hospitalization for angina is often appropriate and necessary, but sometimes can be prevented by early and effective outpatient care. Several medicines are available that can control angina before hospitalization becomes necessary. Surgery, such as coronary artery bypass, is needed to control angina for some patients.

Average annual number of angina discharges from 1992-96 in Utah - 792 per year

Rate of angina discharges from 1992-96 in Utah - 4.1 per 10,000 persons per year

Total charges for angina discharges from 1992-96 in Utah - \$2,560,834 per year

Average total charge per discharge - \$3,698

Average length of stay - 2.6 days

Average annual number and rate of discharges by sex and age for angina, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	460	4.8
Female	332	3.5
<15 years	0.0	0.0
15-44 years	48	0.5
45-64 years	255	8.9
65+ years	489	29.2

Appendicitis with rupture

Appendicitis is a common condition in which the appendix becomes inflamed causing pain. Hospitalization and surgery are needed to remove the appendix. When such care is delayed, the appendix can rupture before it is surgically removed. Such rupture can make the patient much sicker, increasing the risk of the surgery, and necessitating a longer recovery time.

Average annual number of appendicitis with rupture discharges from 1992-96 in Utah - 584 per year

Rate of appendicitis with rupture discharges from 1992-96 in Utah - 3.1 per 10,000 persons per year

Total charges for appendicitis with rupture discharges from 1992-96 in Utah - \$5,340,426 per year

Average total charge per discharge - \$9,297

Average length of stay - 5.72 days

Average annual number and rate of discharges by sex and age for appendicitis, Utah 1992-1996

	Number	Rate per 10,000 persons
Male	347	3.6
Female	236	2.5
<15 years	184	3.3
15-44 years	258	2.9
45-64 years	91	3.2
65+ years	51	3.0

Gastroenteritis

Gastroenteritis refers to infections of the gastrointestinal tract (stomach, esophagus, intestines). Its symptoms can include diarrhea, abdominal discomfort, nausea, and vomiting. Admission to a hospital often results when a patient is unable to drink enough liquids to make up for the fluid that they are losing from diarrhea or vomiting. Such hospitalizations may be preventable if care is provided before a patient becomes dehydrated.

Average annual number of gastroenteritis discharges from 1992-96 in Utah - 365 per year

Rate of gastroenteritis discharges from 1992-96 in Utah - 1.9 per 10,000 persons per year

Total charges for gastroenteritis discharges from 1992-96 in Utah - \$1,022,775 per year

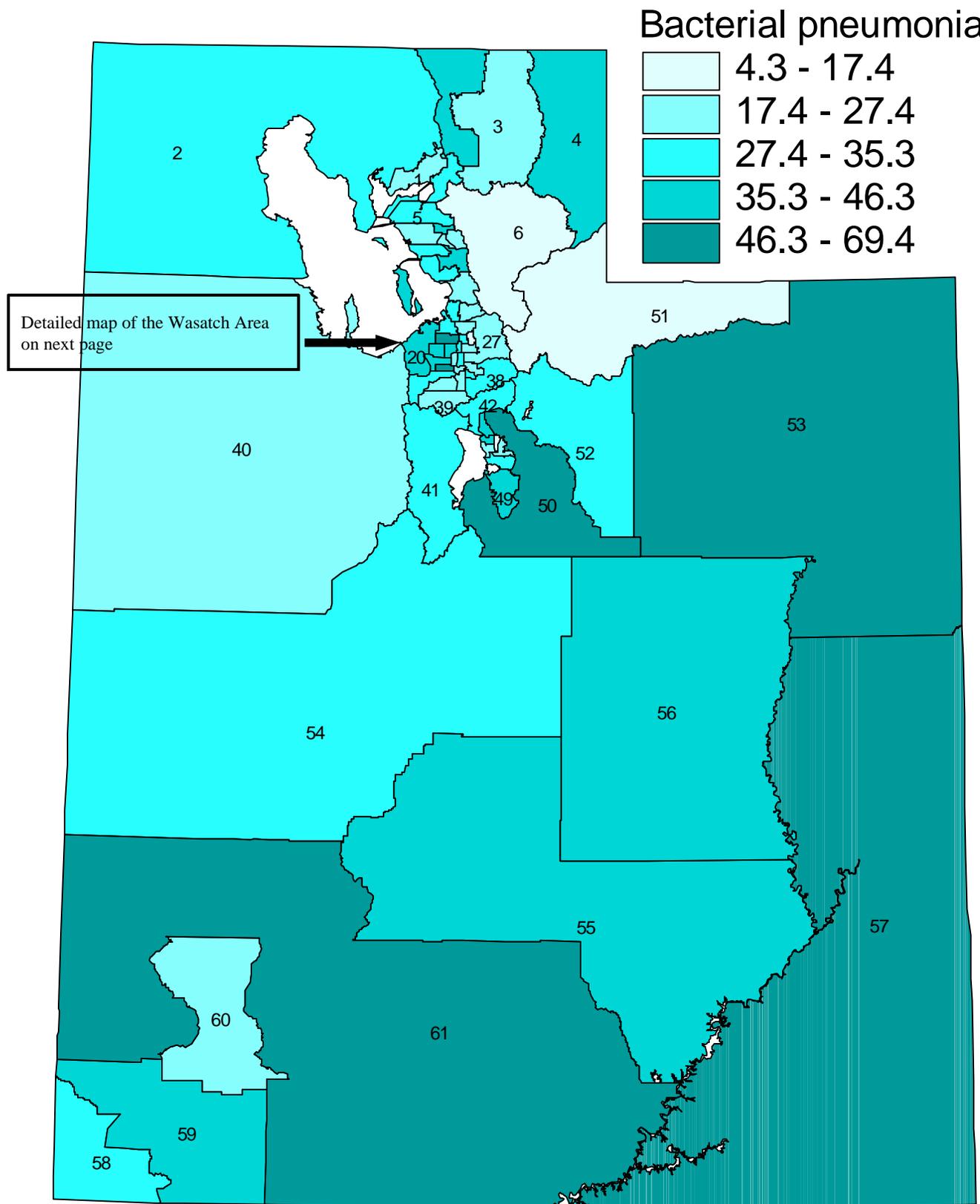
Average total charge per discharge - \$2,906

Average length of stay - 2.59 days

Average annual number and rate of discharges by sex and age for gastroenteritis, Utah 1995-1996

	Number	Rate per 10,000 persons
Male	140	1.5
Female	225	2.3
<15 years	111	2.0
15-44 years	124	1.4
45-64 years	59	2.0
65+ years	71	4.2

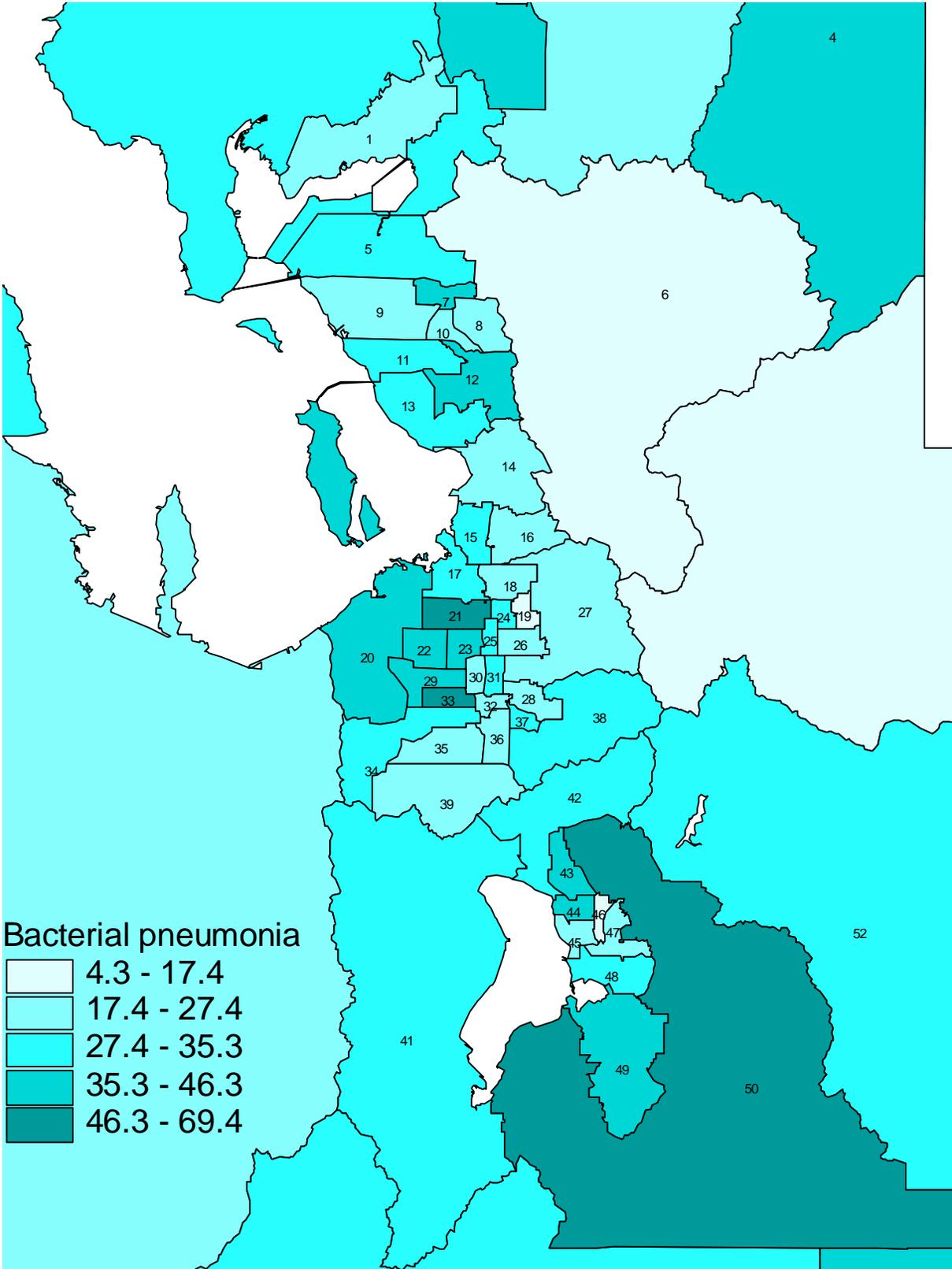
Figure 1: Average Annual Rates of Hospitalization for Bacterial Pneumonia per 10,000 Persons. Utah, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

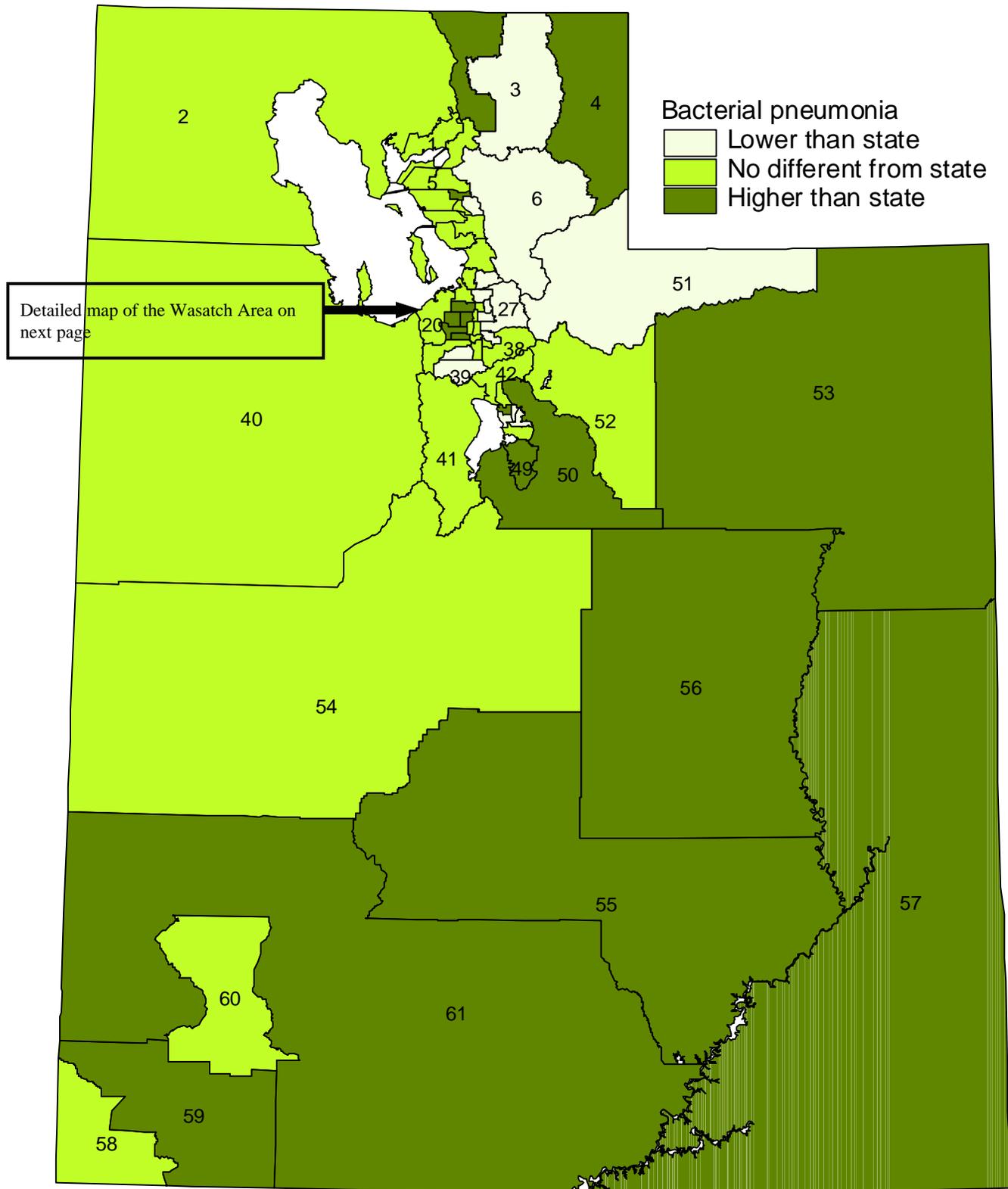
Figure 2: Average Annual Rates of Hospitalization for Bacterial Pneumonia per 10,000 Persons. Utah Wasatch Front, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

Figure 3: Average Annual Rates of Hospitalization for Bacterial Pneumonia per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.

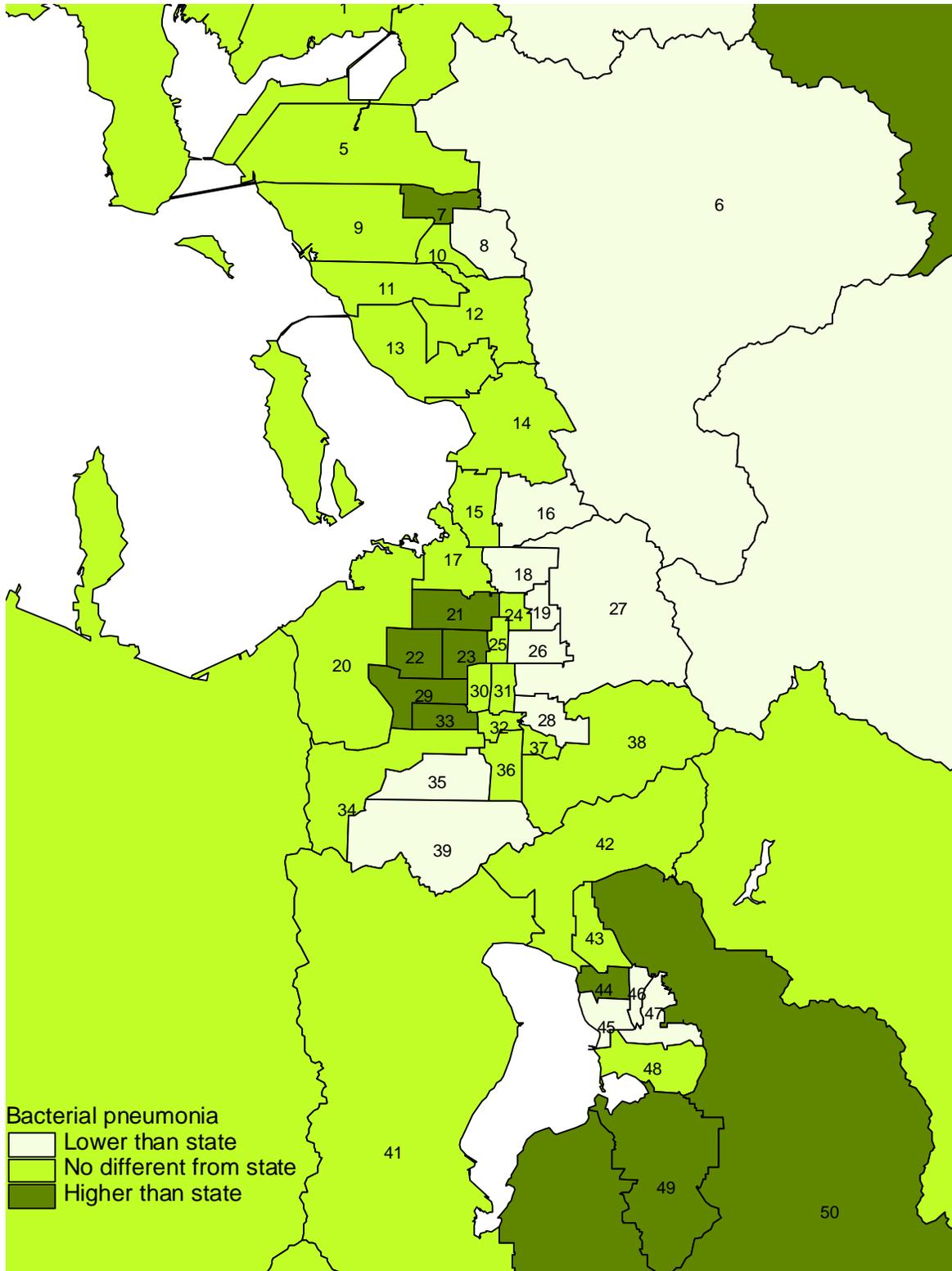


Detailed map of the Wasatch Area on next page

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

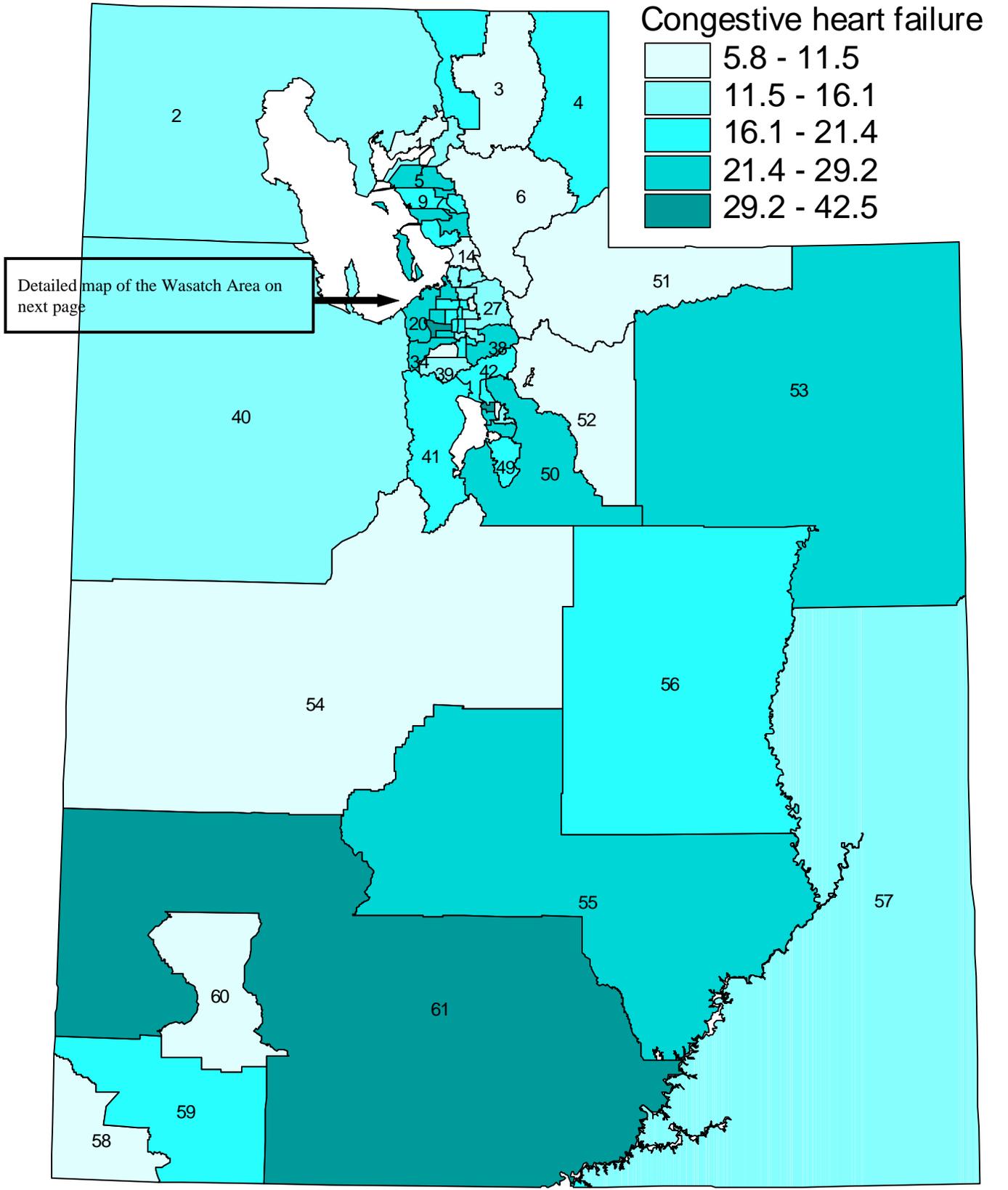
Figure 4: Average Annual Rates of Hospitalization for Bacterial Pneumonia per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

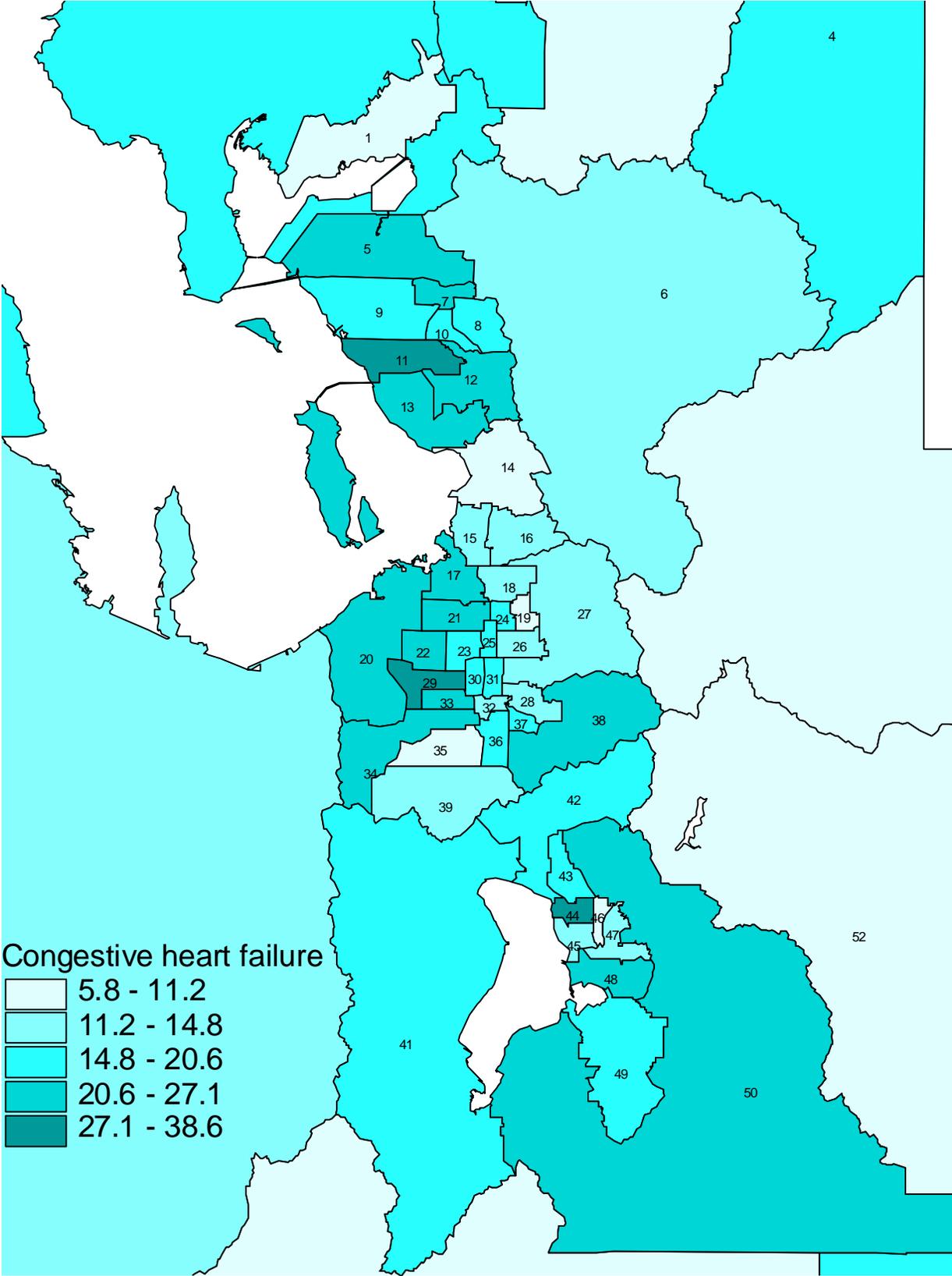
Figure 5: Average Annual Rates of Hospitalization for Congestive Heart Failure per 10,000 Persons. Utah, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

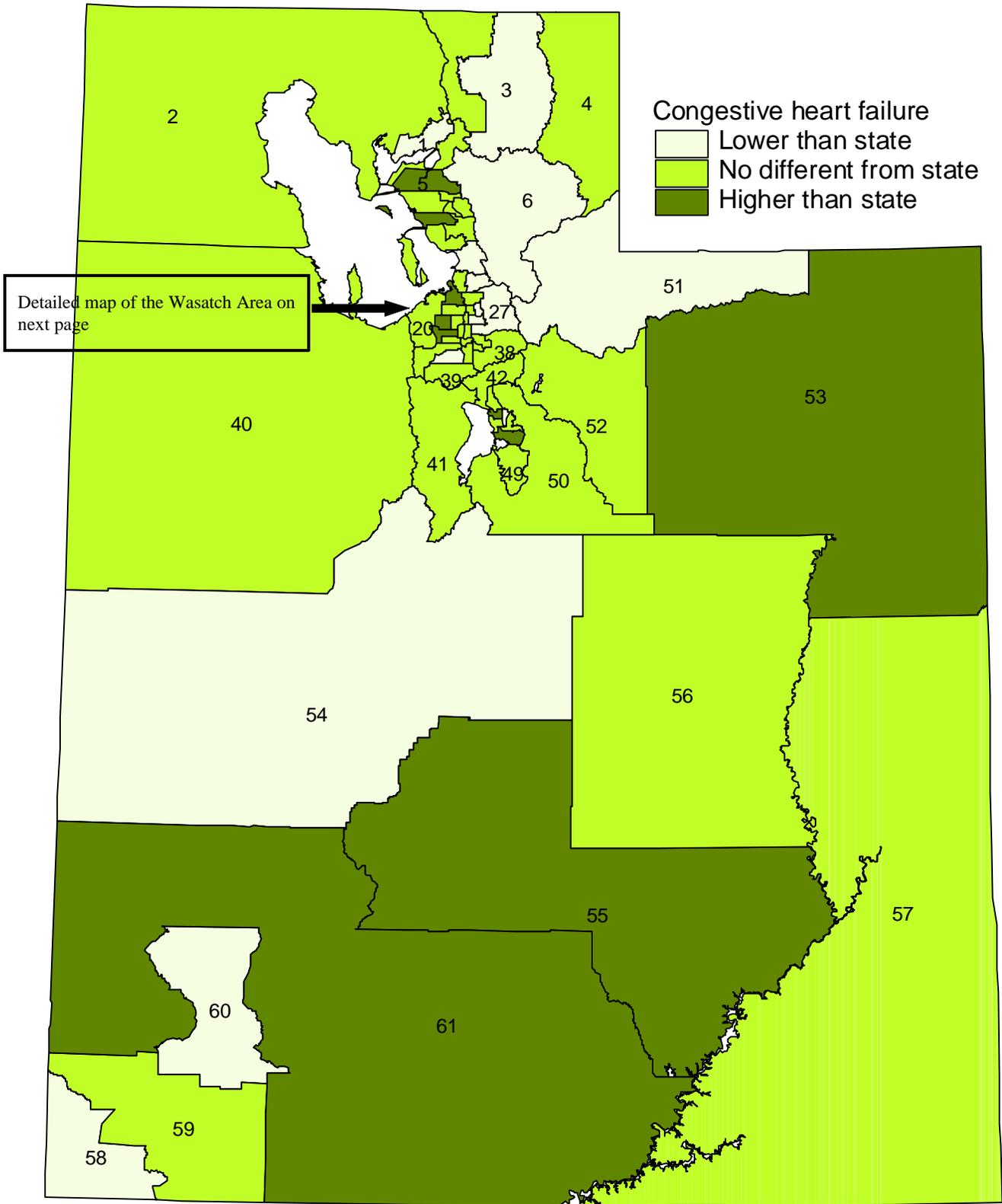
Figure 6: Average Annual Rates of Hospitalization for Congestive Heart Failure per 10,000 Persons. Utah Wasatch Front, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

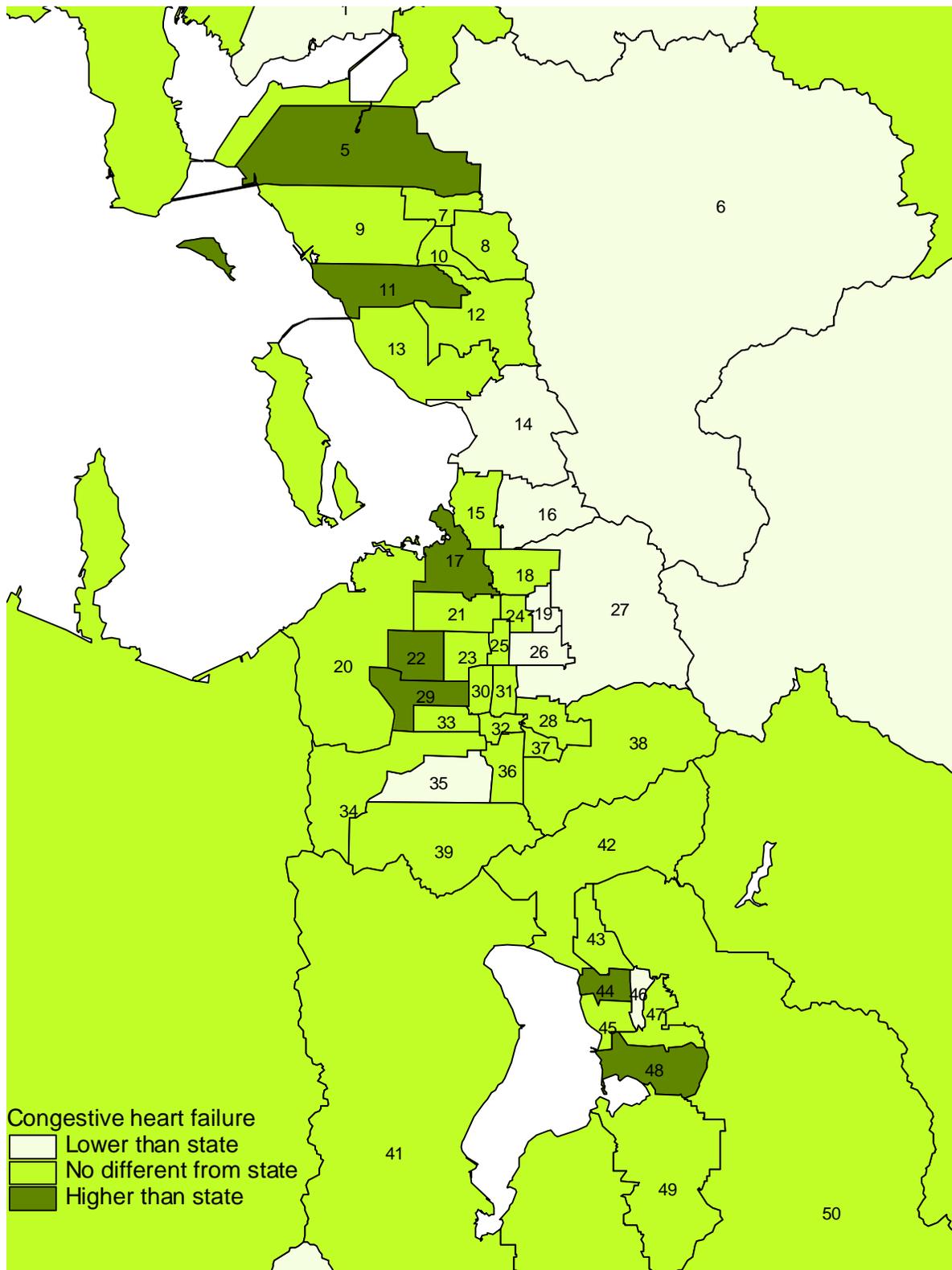
Figure 7: Average Annual Rates of Hospitalization for Congestive Heart Failure per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

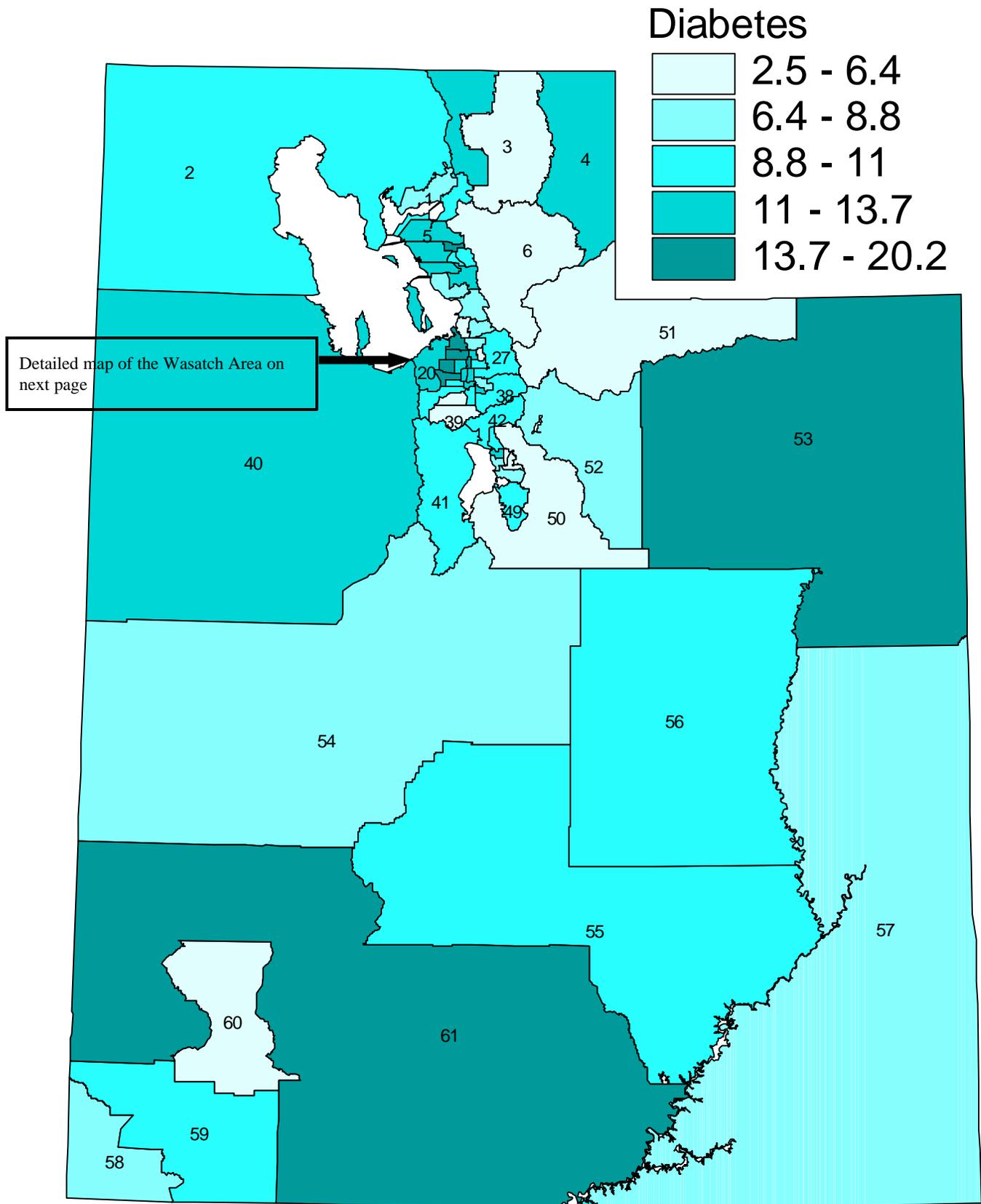
Figure 8: Average Annual Rates of Hospitalization for Congestive Heart Failure per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map correspond to small area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

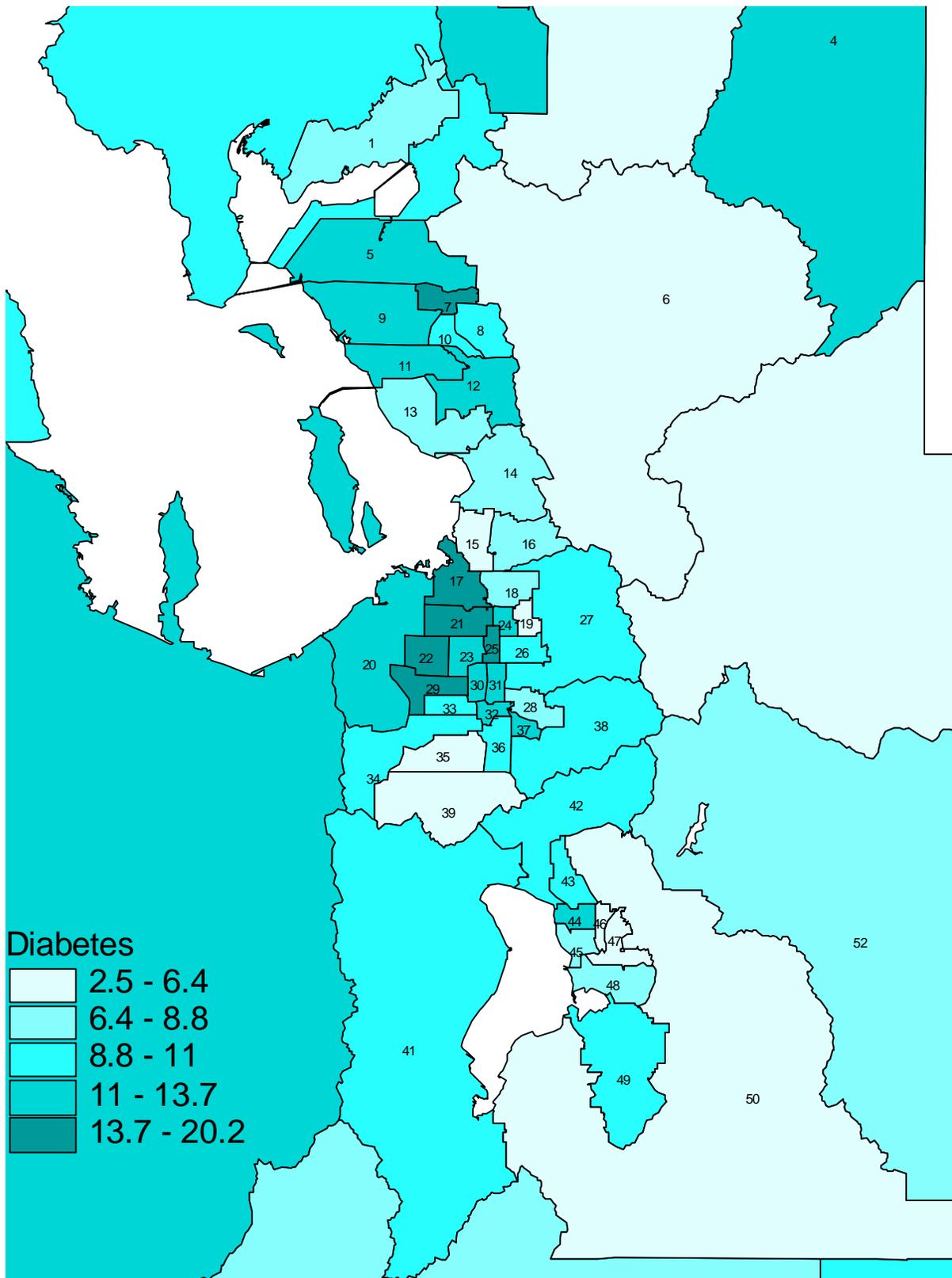
Figure 9: Average Annual Rates of Hospitalizations for Diabetes per 10,000 Persons. Utah, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map correspond to small area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

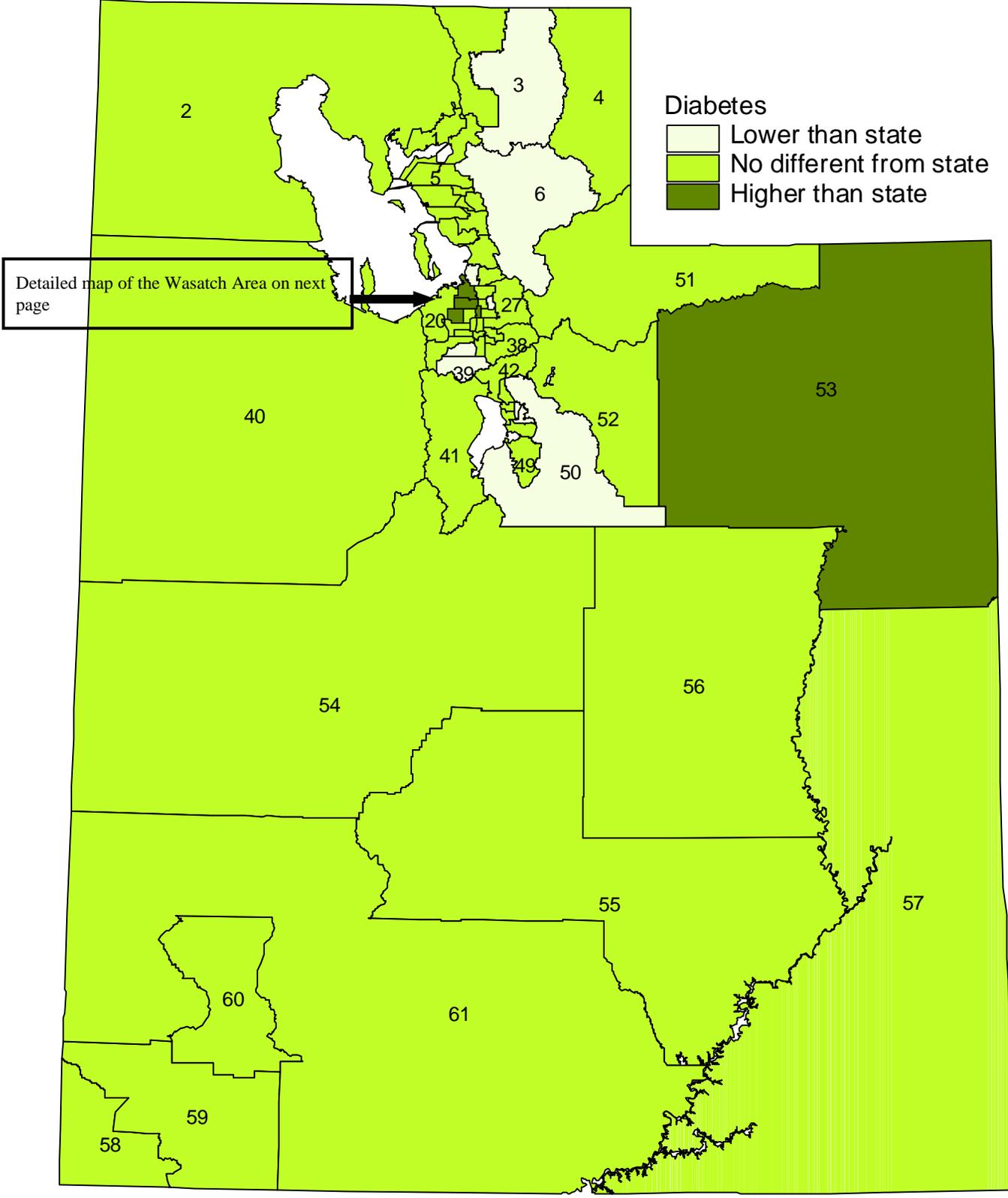
Figure 10: Average Annual Rates of Hospitalization for Diabetes per 10,000 Persons. Utah Wasatch Front, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on the patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

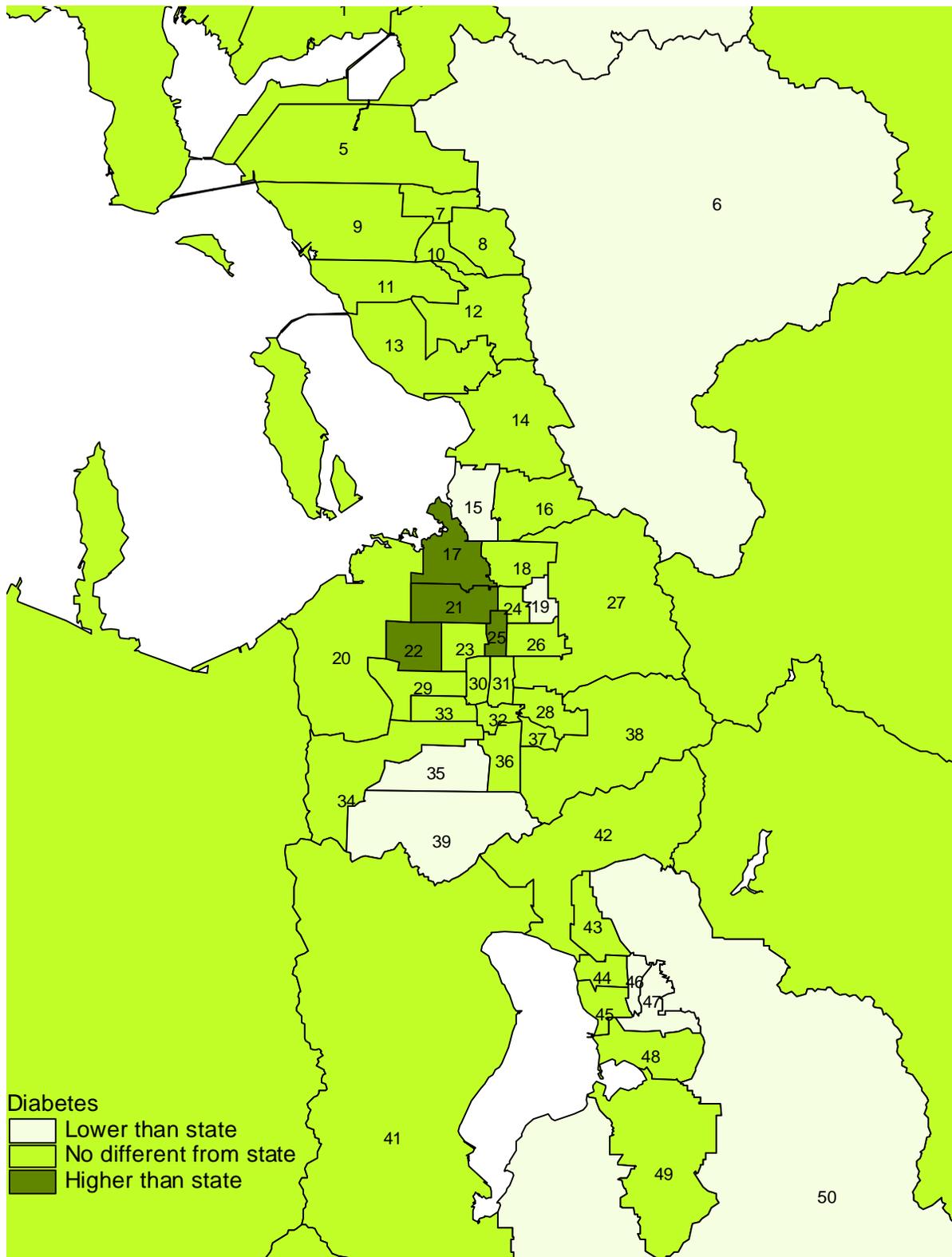
Figure 11: Average Annual Rates of Hospitalization for Diabetes per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

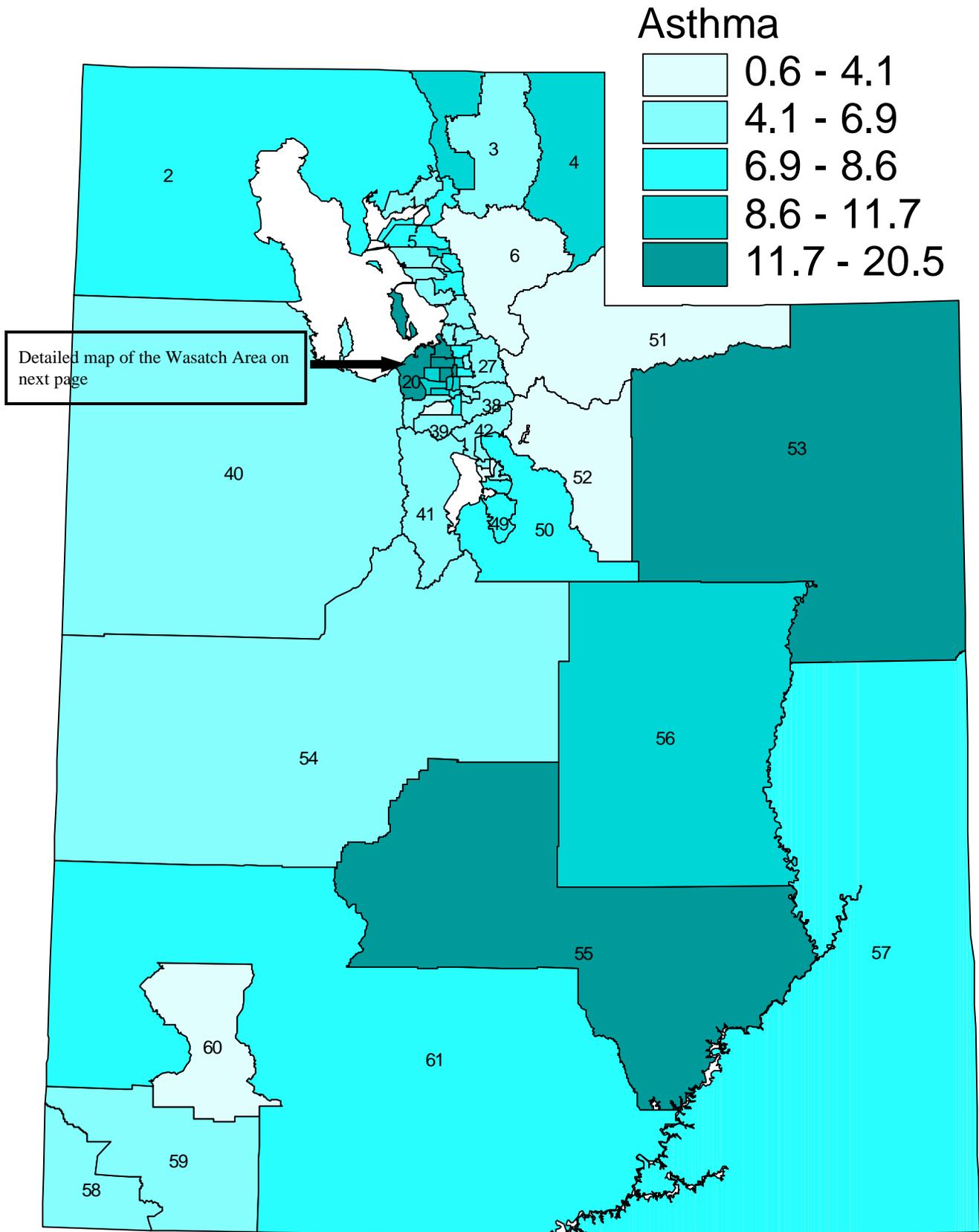
Figure 12: Average Annual Rates of Hospitalization for Diabetes per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

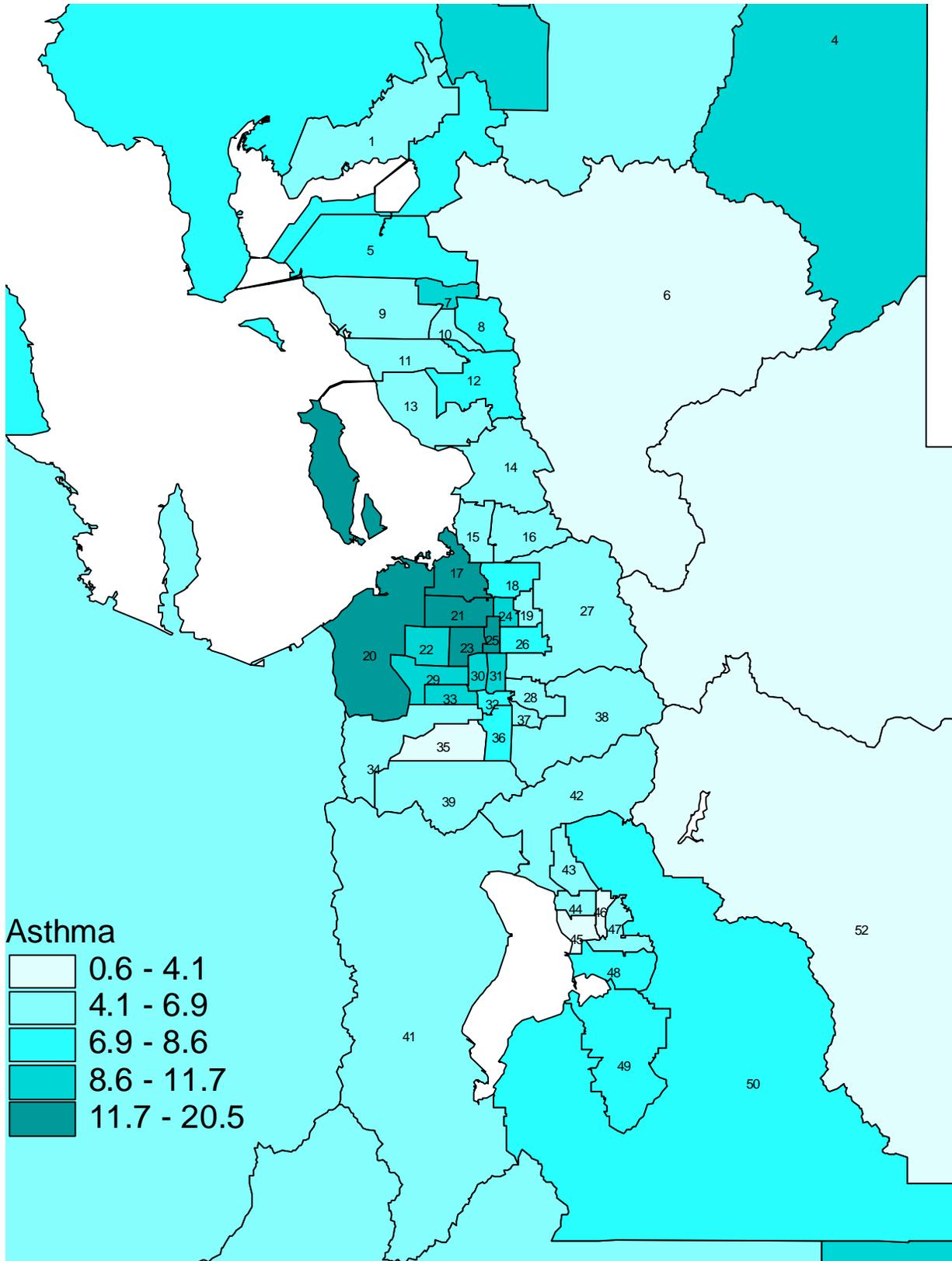
Figure 13: Average Annual Rates of Hospitalization for Asthma per 10,000 Persons. Utah, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

Figure 14: Average Annual Rates of Hospitalization for Asthma per 10,000 Persons. Utah Wasatch Front, 1992-96.



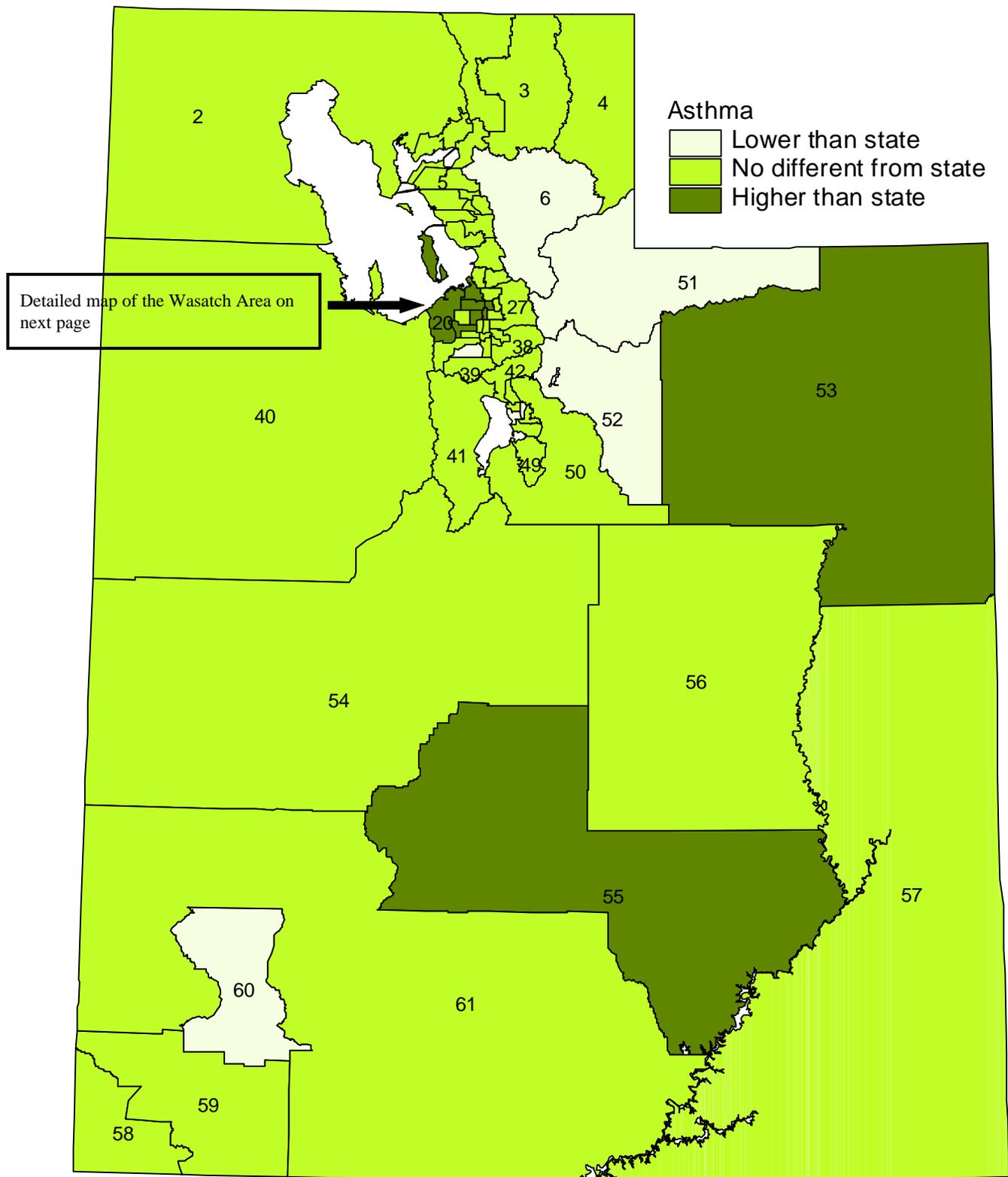
Asthma



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

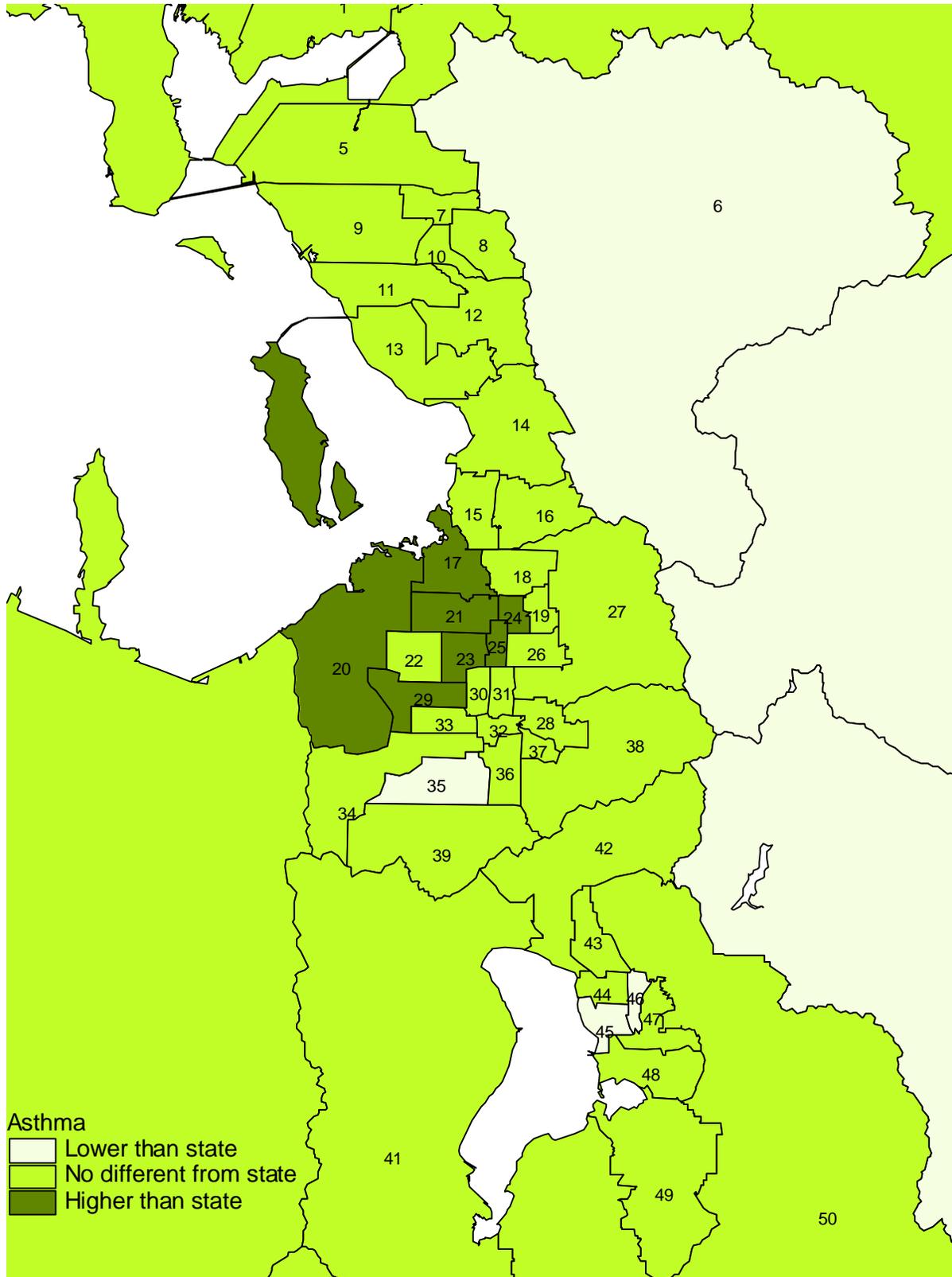
Figure 15: Average Annual Rates of Hospitalization for Asthma per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

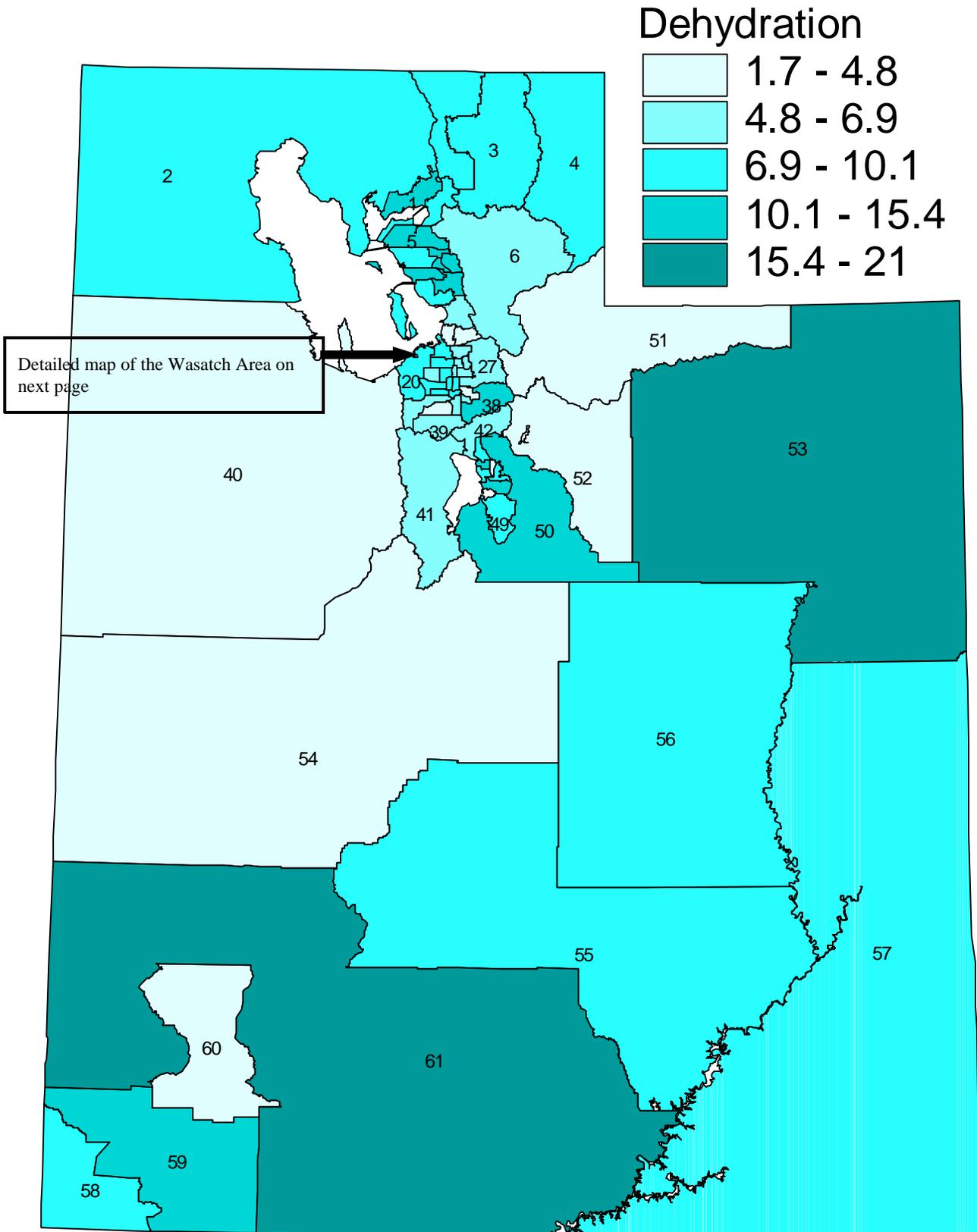
Figure 16: Average Annual Rates of Hospitalization for Asthma per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

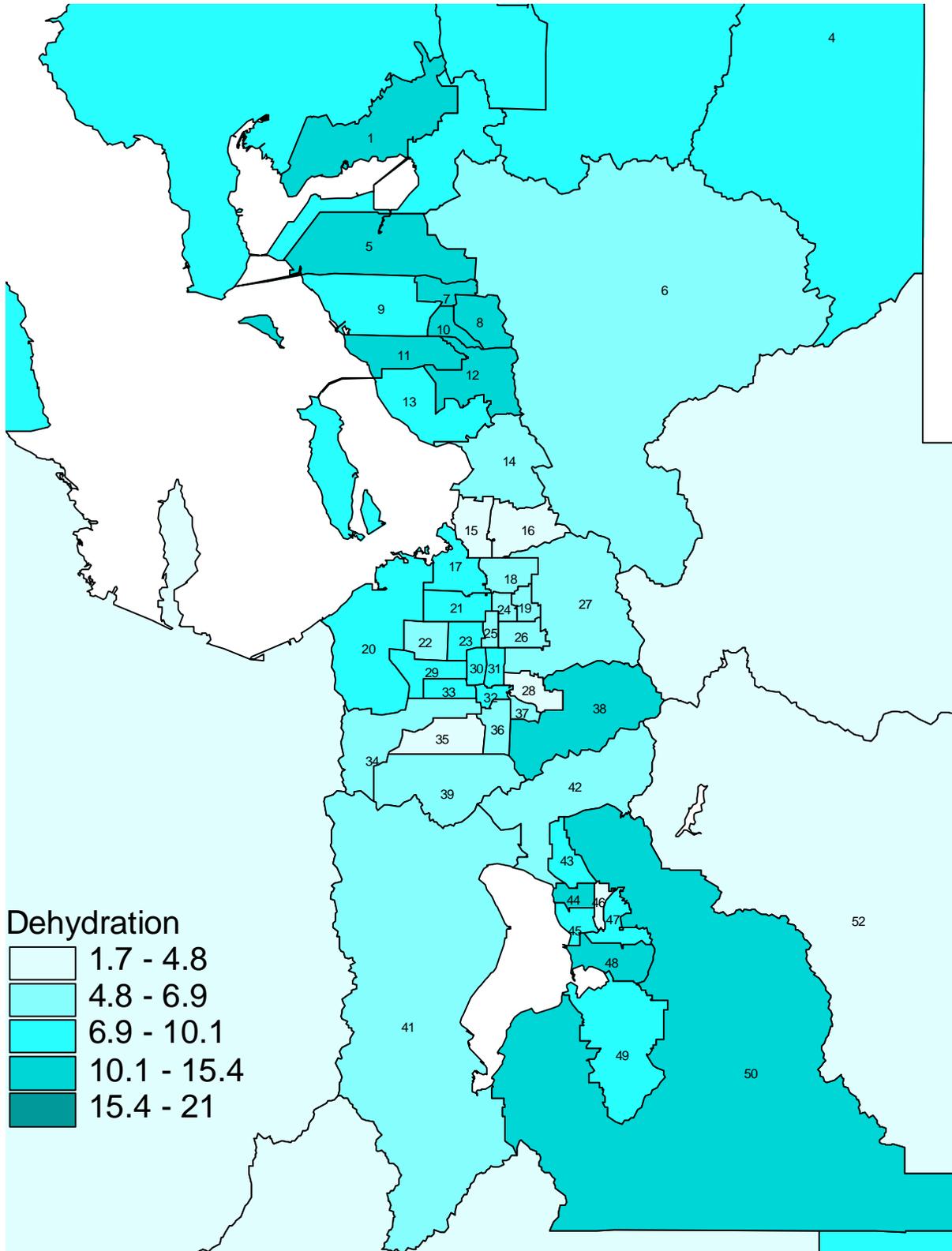
Figure 17: Average Annual Rates of Hospitalization for Dehydration per 10,000 Persons. Utah, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

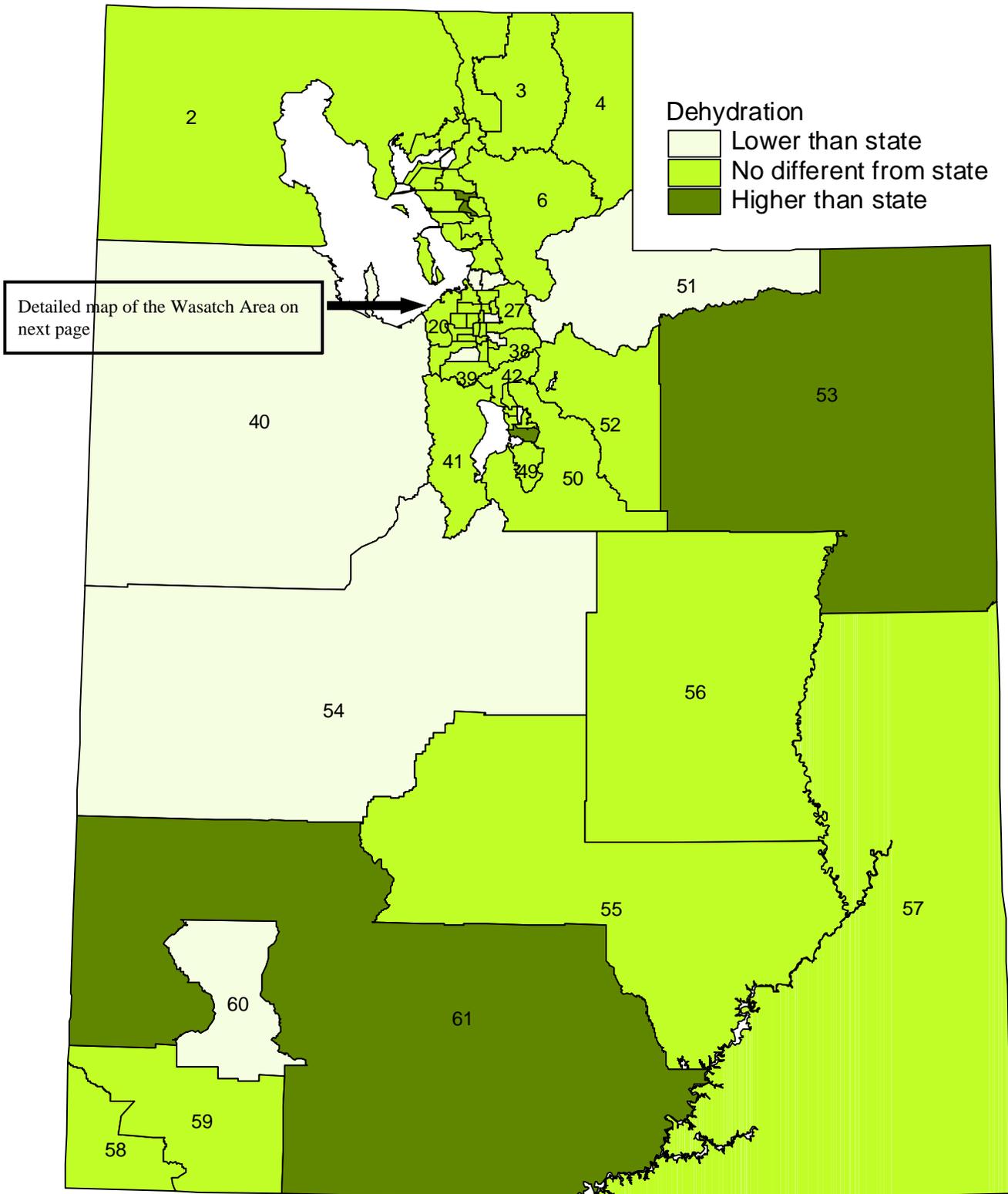
Figure 18: Average Annual Rates of Hospitalization for Dehydration per 10,000 Persons. Utah Wasatch Front, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

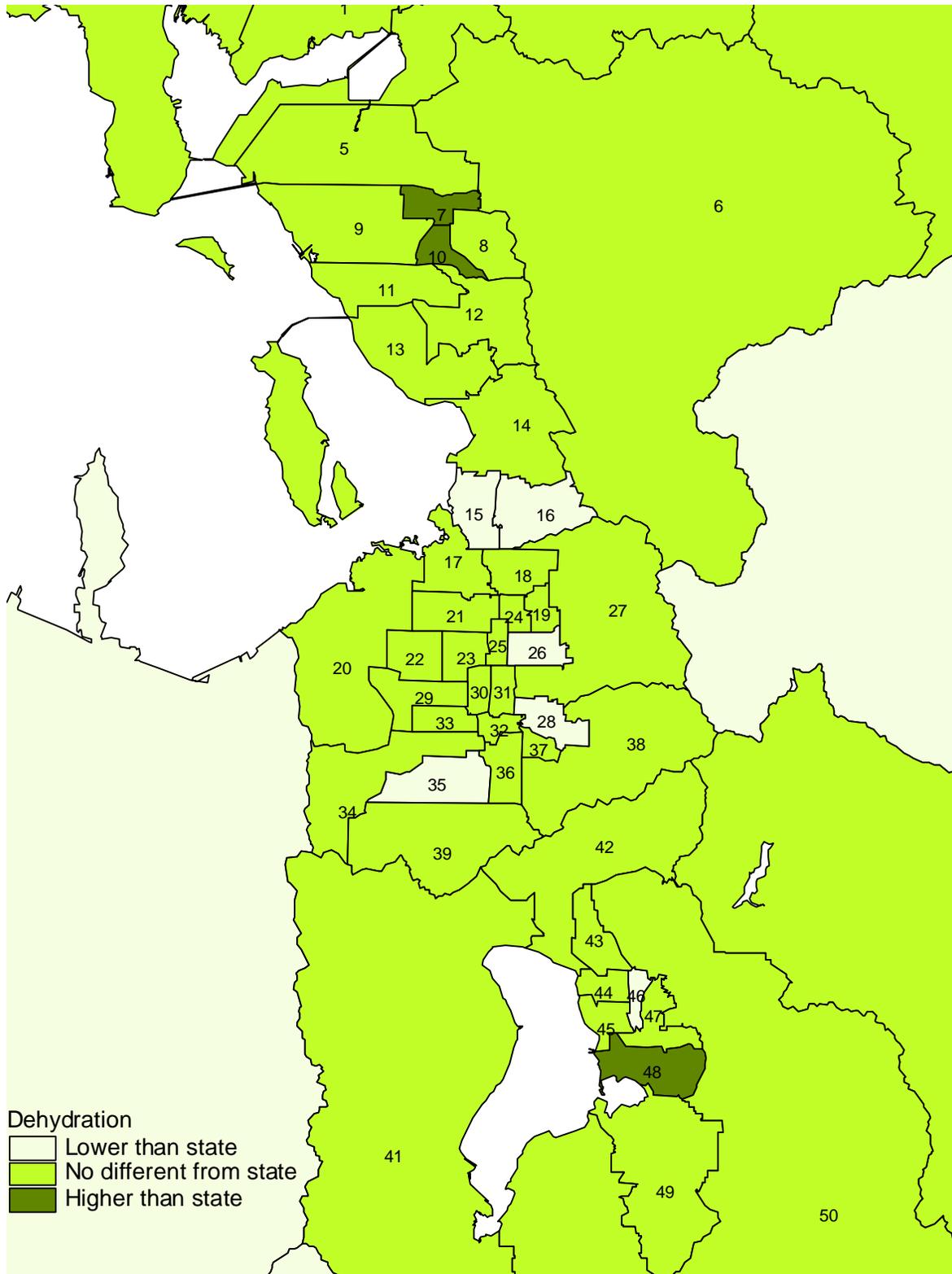
Figure 19: Average Annual Rates of Hospitalization for Dehydration per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate . Utah, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

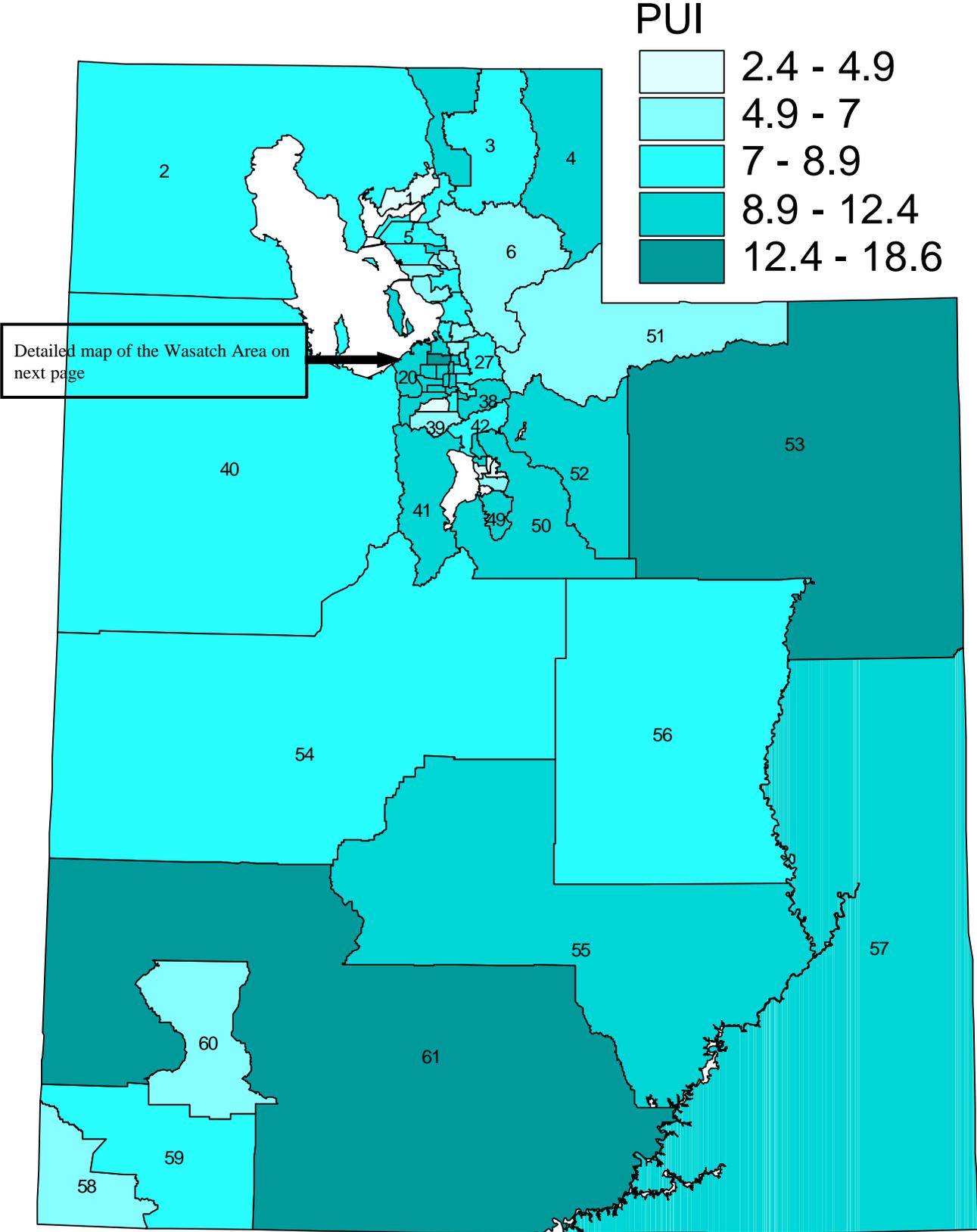
Figure 20: Average Annual Rates of Hospitalization for Dehydration per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

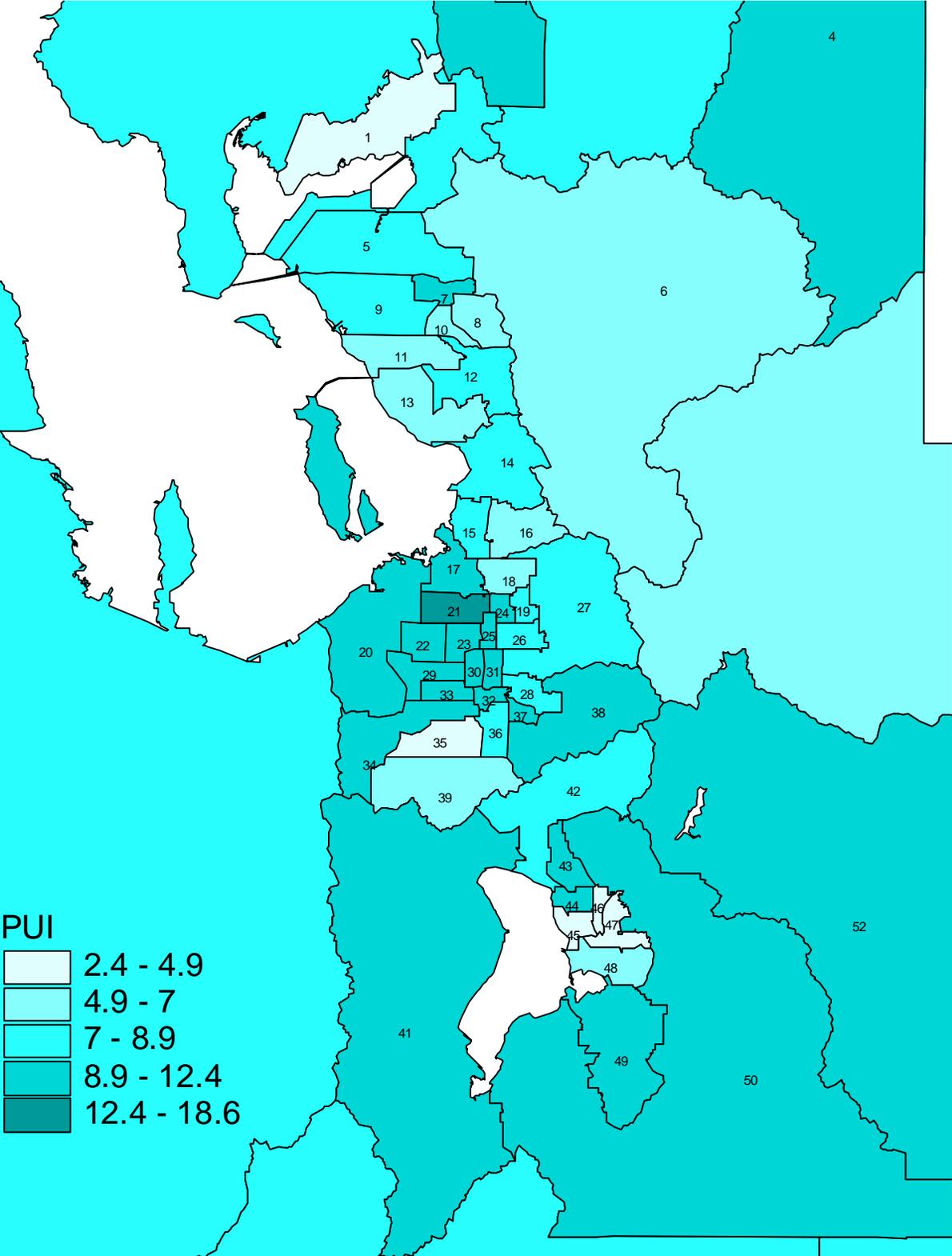
Figure 21: Average Annual Rates of Hospitalization for Pyelonephritis/Urinary Infection (PUI) per 10,000 Persons. Utah, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

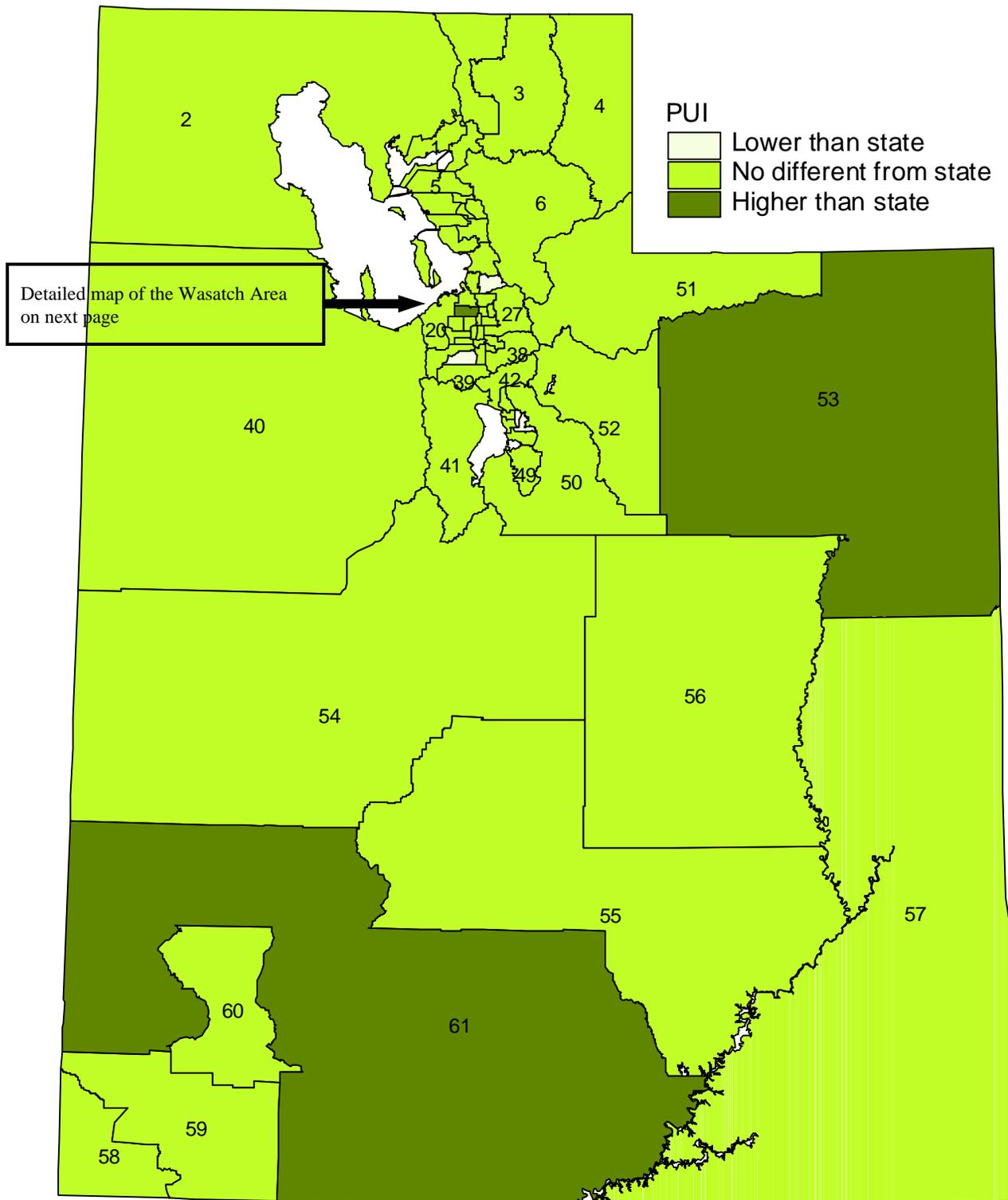
Figure 22: Average Annual Rates of Hospitalization for Pyelonephritis/Urinary Infection (PUI) per 10,000 Persons. Utah Wasatch Front, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

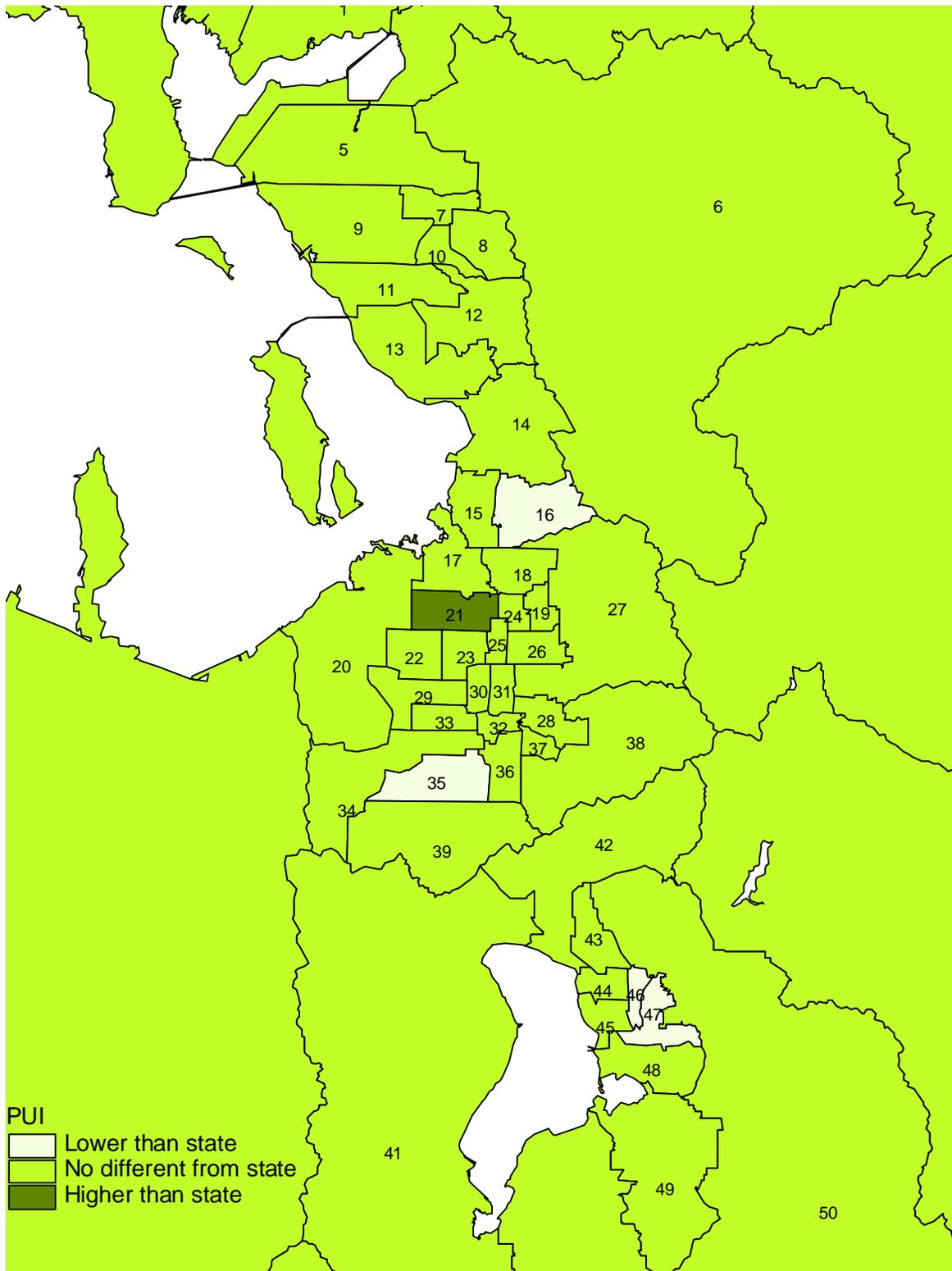
Figure 23: Average Annual Rates of Hospitalization for Pyelonephritis/Urinary Infection (PUI) per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

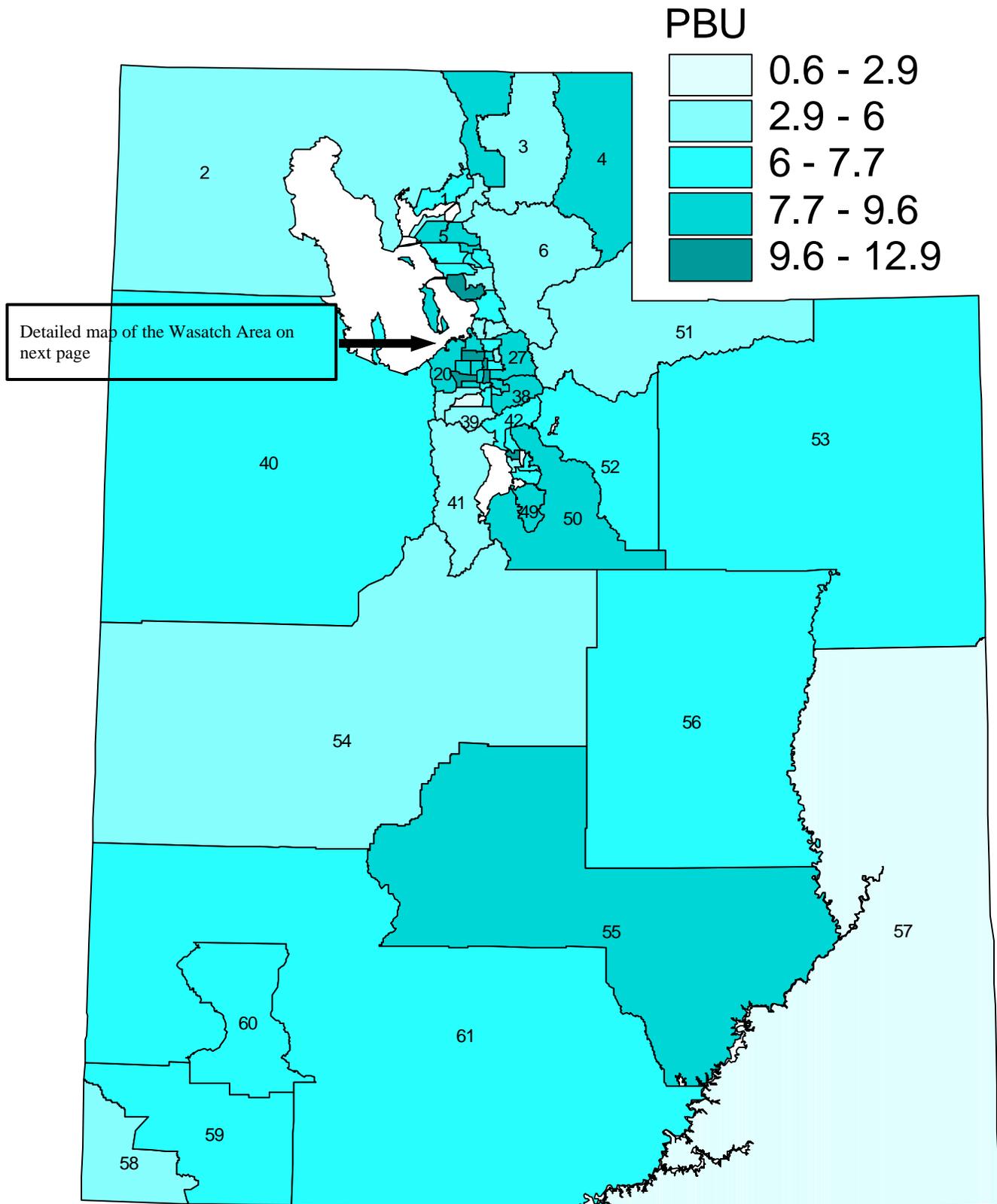
Figure 24: Average Annual Rates of Hospitalization for Pyelonephritis/Urinary Infection (PUI) per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

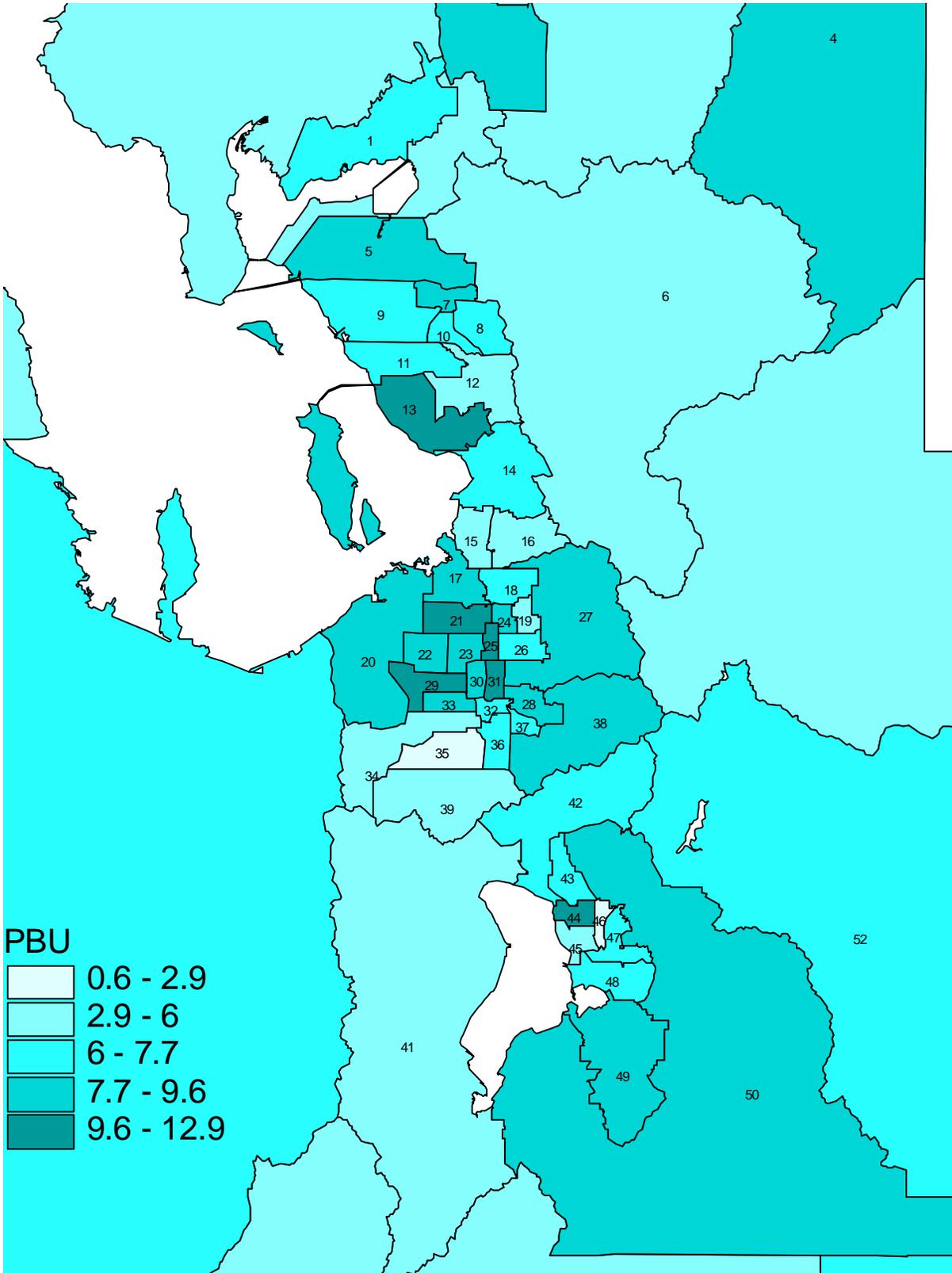
Figure 25: Average Annual Rates of Hospitalization for Perforated or Bleeding Ulcer (PBU) per 10,000 Persons. Utah, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

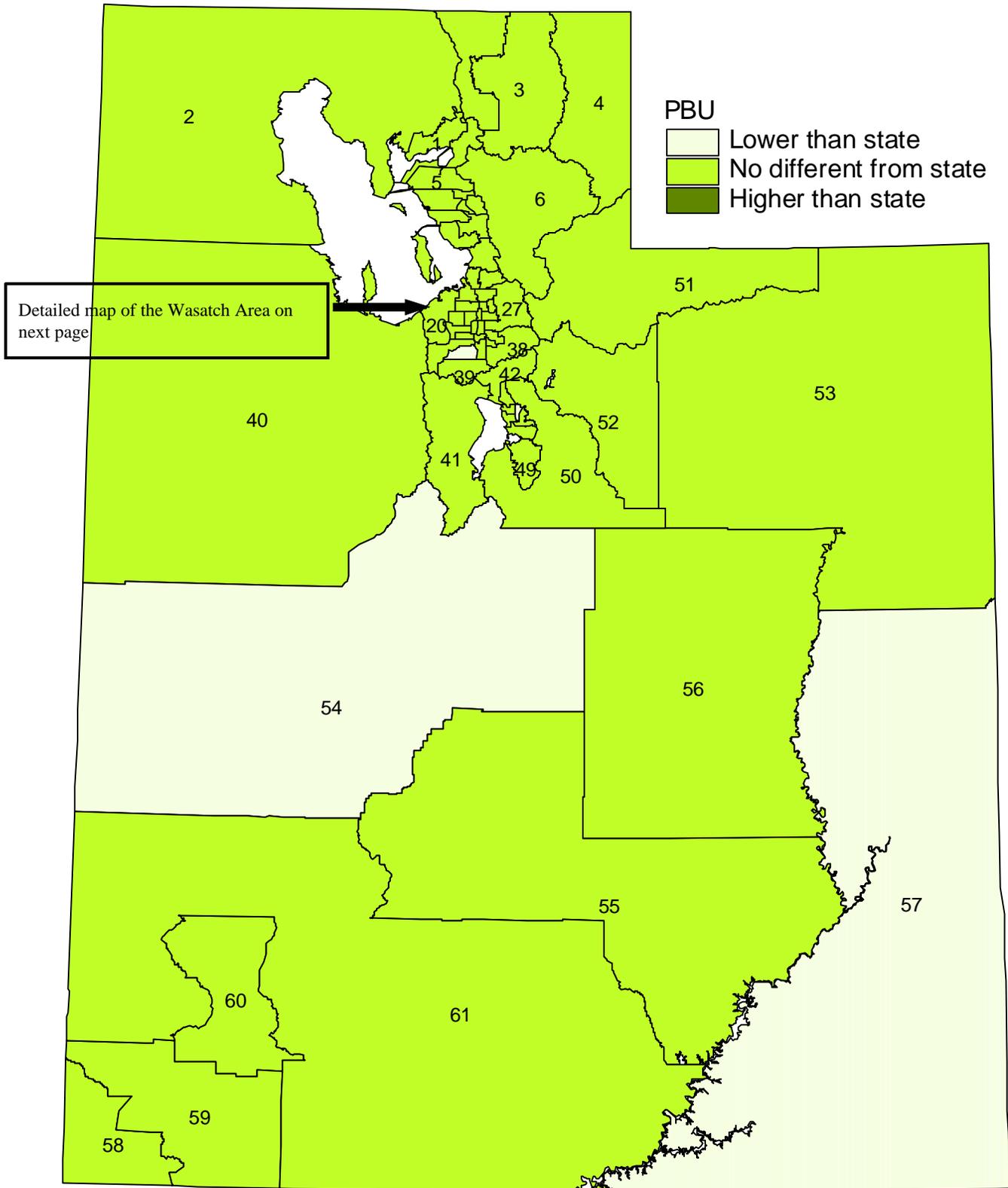
Figure 26: Average Annual Rates of Hospitalization for Perforated or Bleeding Ulcer (PBU) per 10,000 Persons. Utah Wasatch Front, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

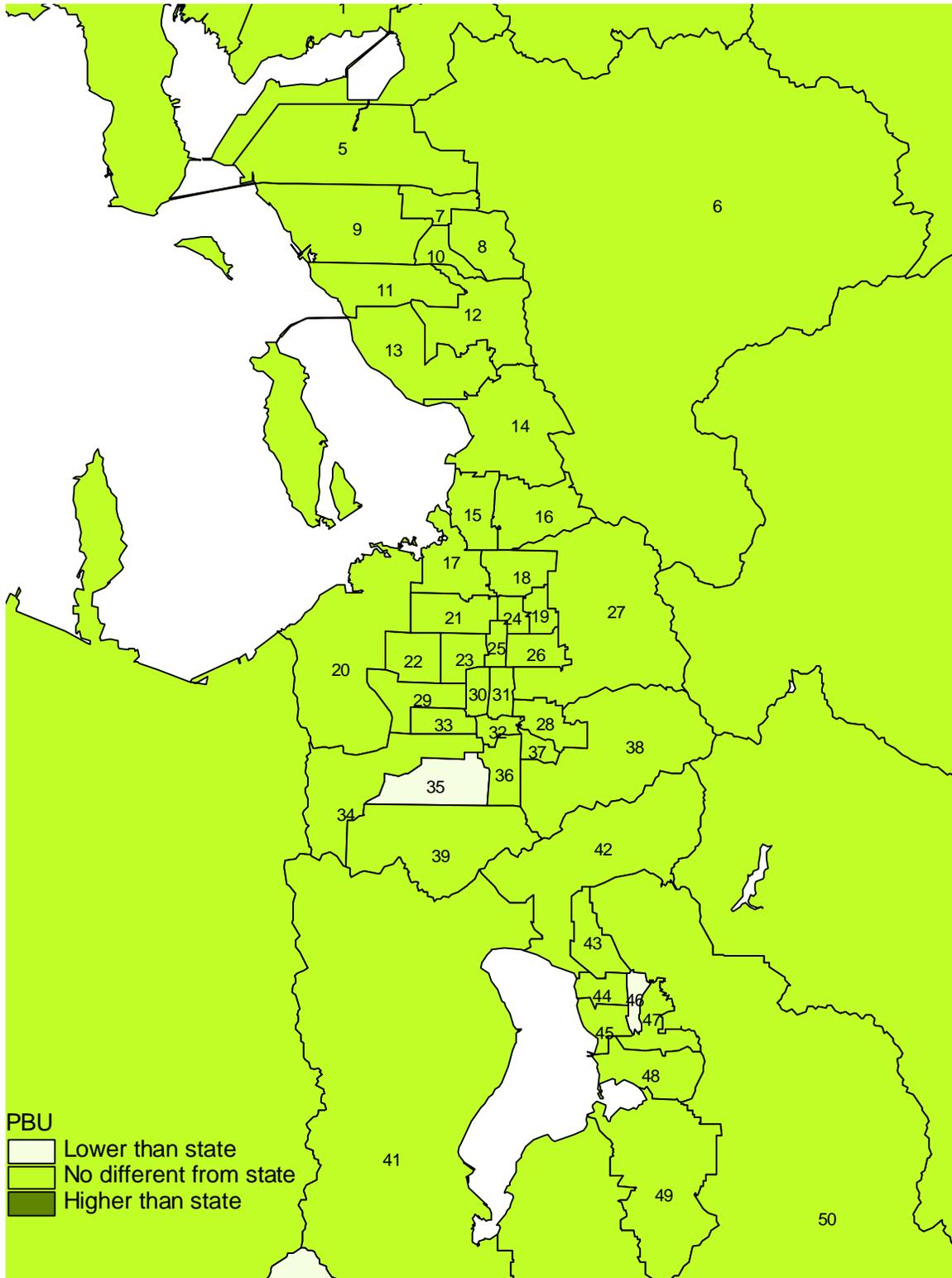
Figure 27: Average Annual Rates of Hospitalization for Perforated or Bleeding Ulcer (PBU) per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

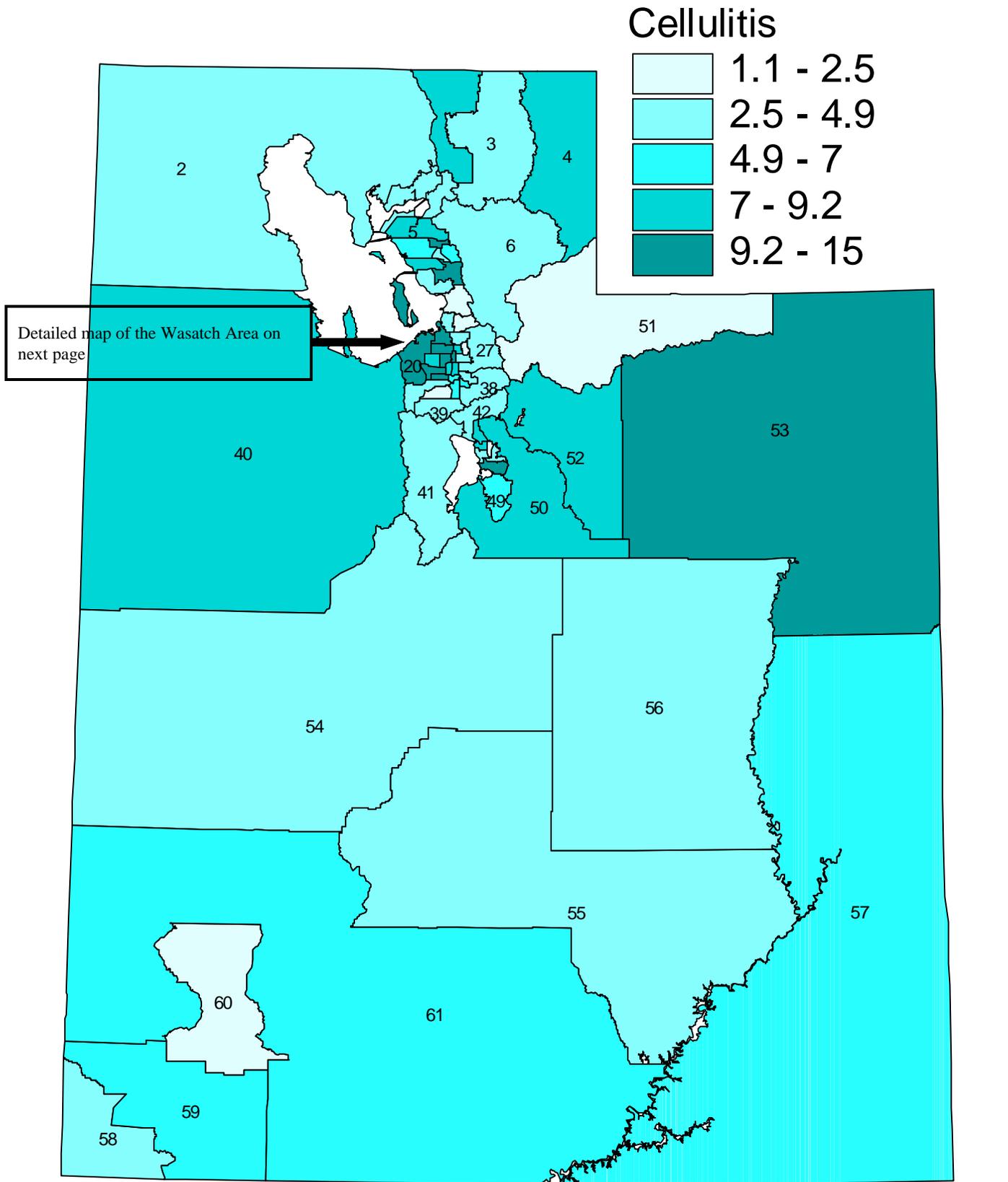
Figure 28: Average Annual Rates of Hospitalization for Perforated or Bleeding Ulcer (PBU) per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate . Utah Wasatch Front, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

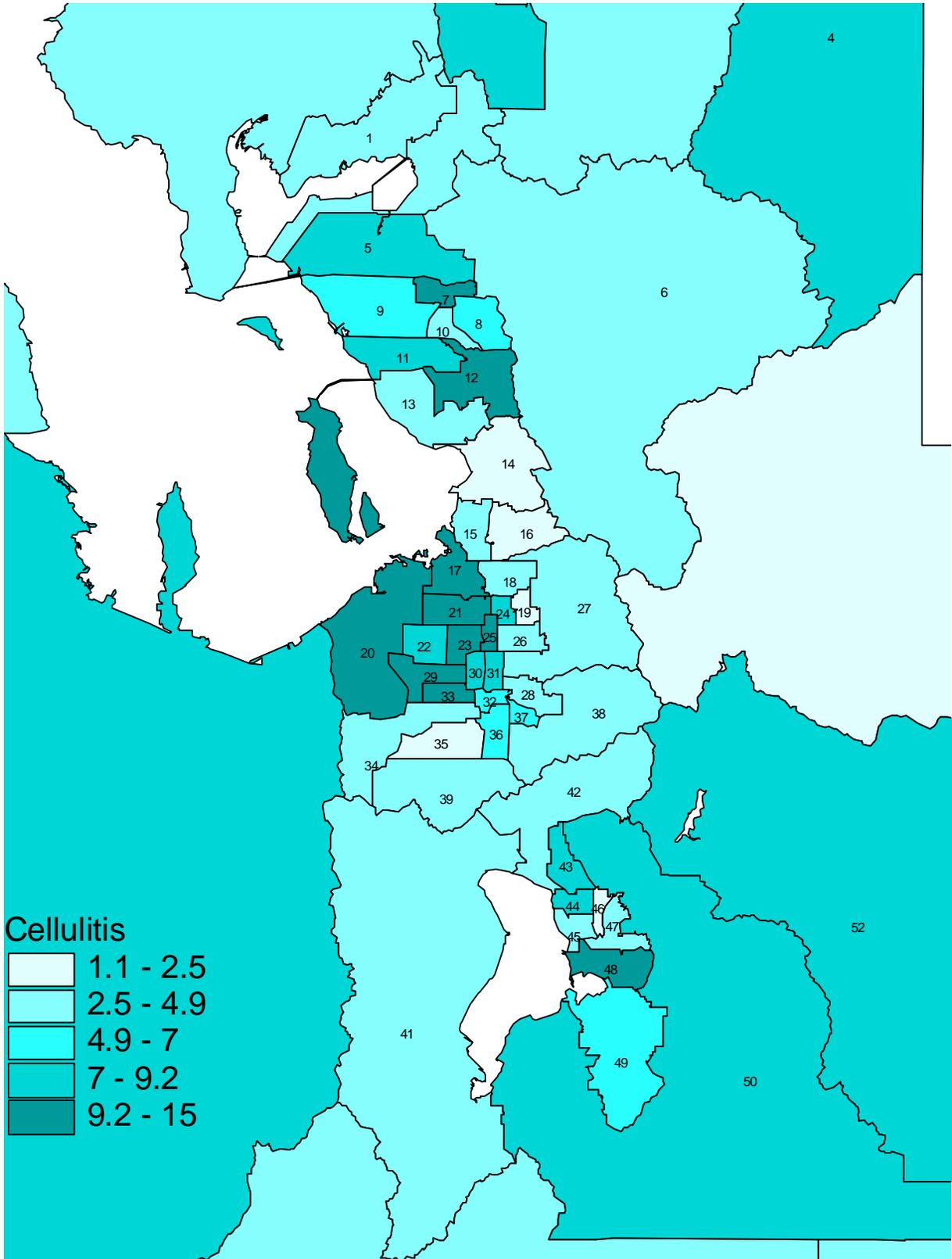
Figure 29: Average Annual Rates of Hospitalization for Cellulitis per 10,000 Persons. Utah, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96. Small area designation for each discharge was based on that patient's residence.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

Figure 30: Average Annual Rates of Hospitalizations for Cellulitis per 10,000 Persons. Utah Wasatch Front, 1992-96.

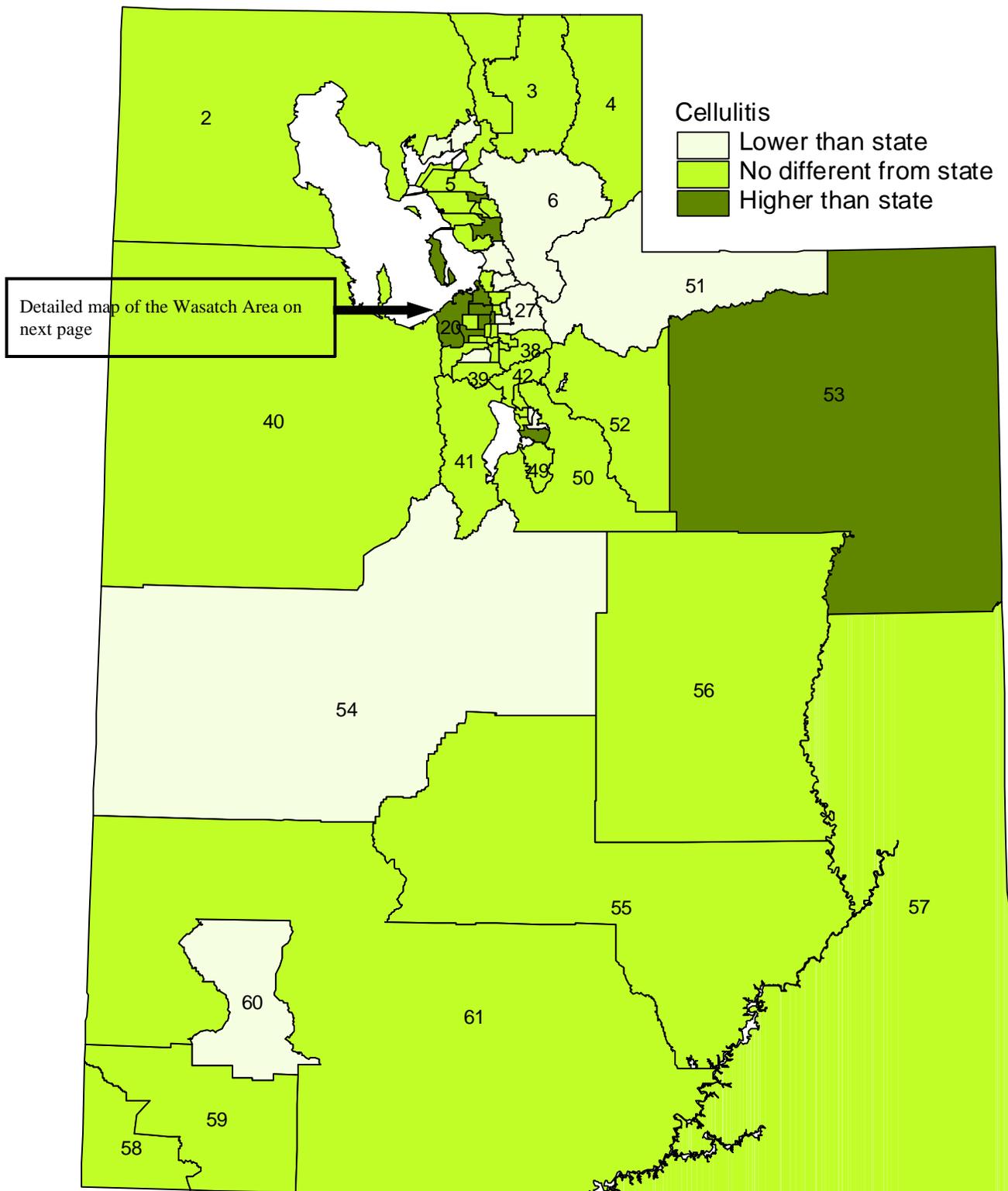


Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.

Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

Figure 31: Average Annual Rates of Hospitalizations for Cellulitis per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.

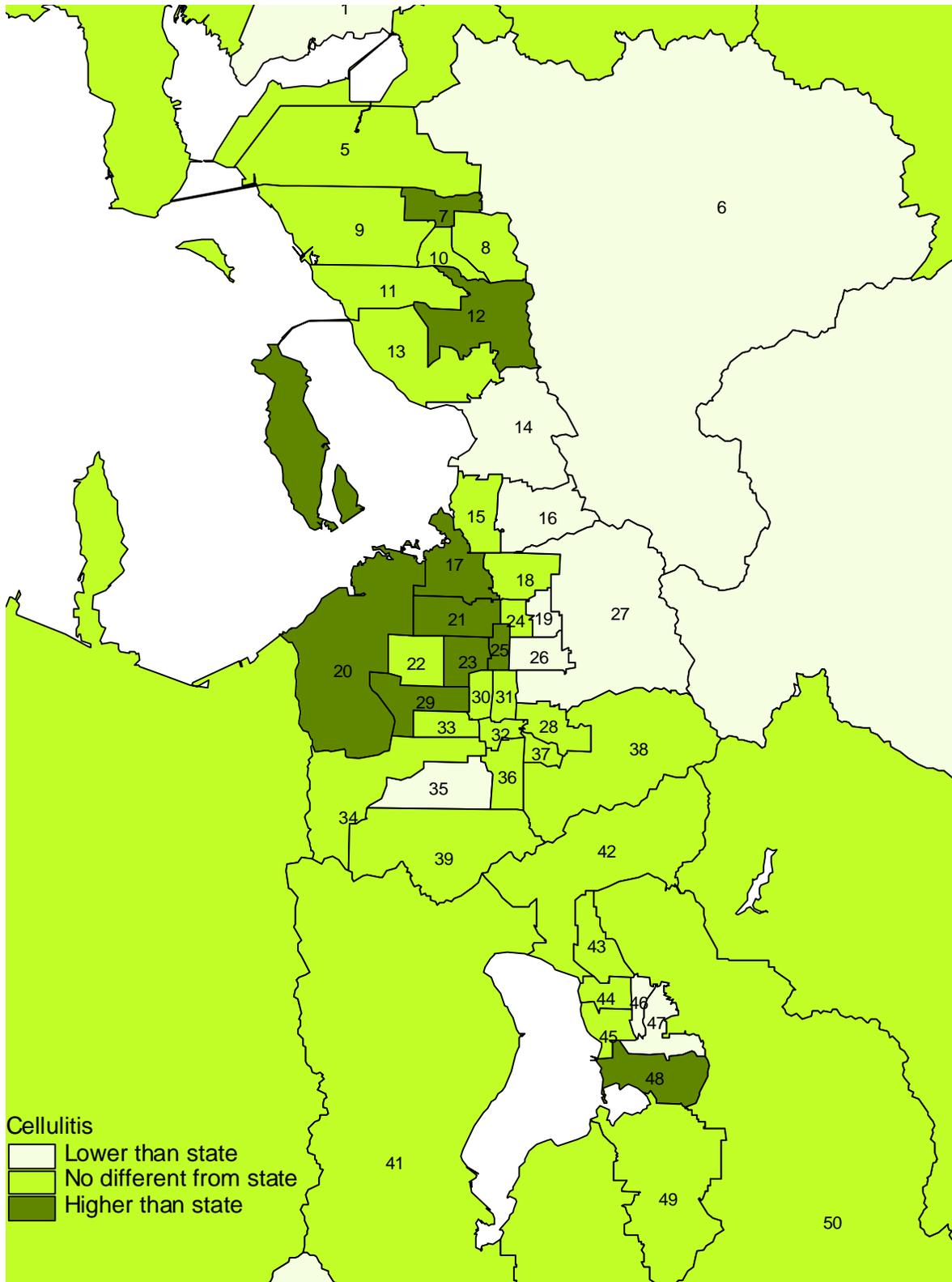


Detailed map of the Wasatch Area on next page

A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

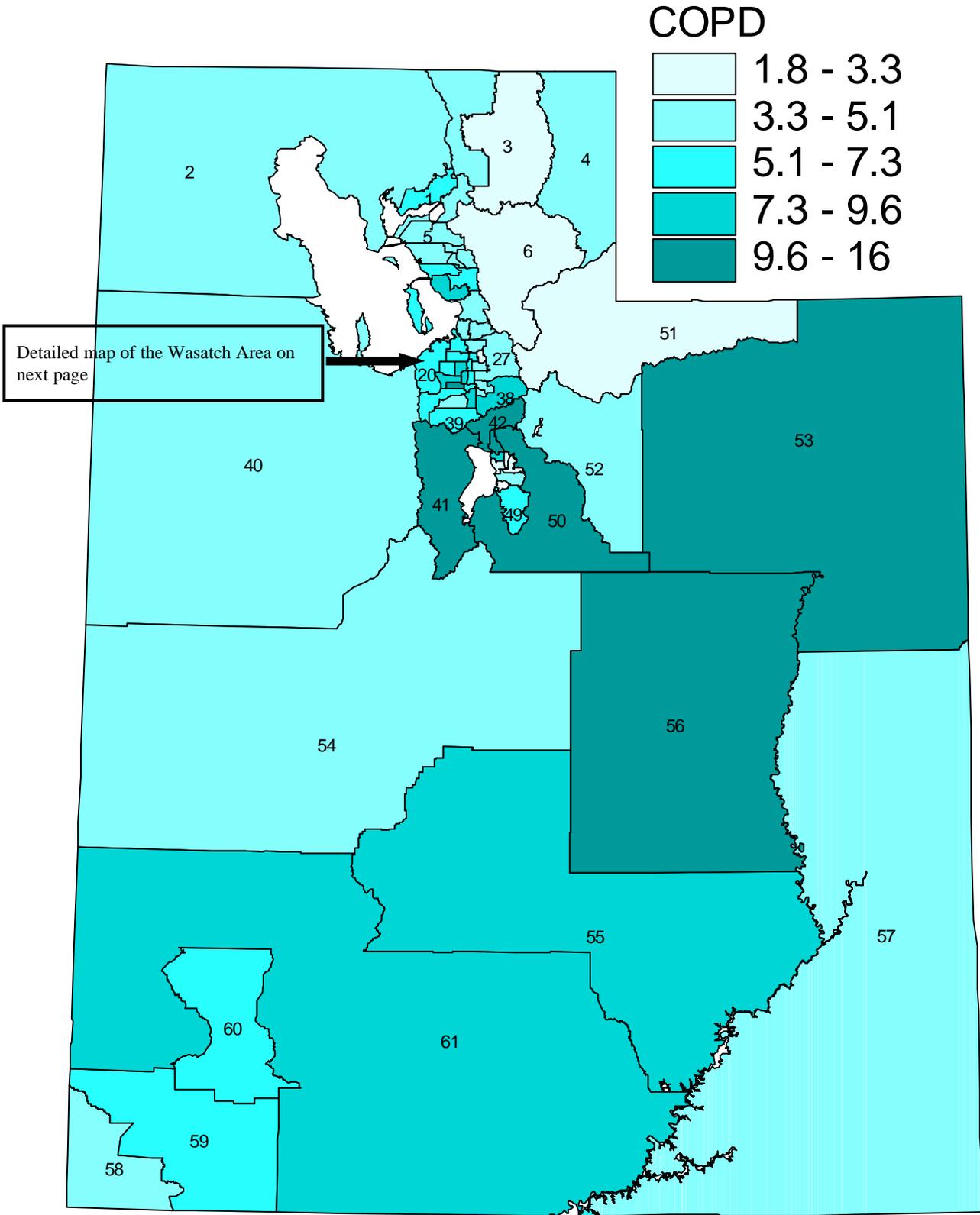
Figure 32: Average Annual Rates of Hospitalization for Cellulitis per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

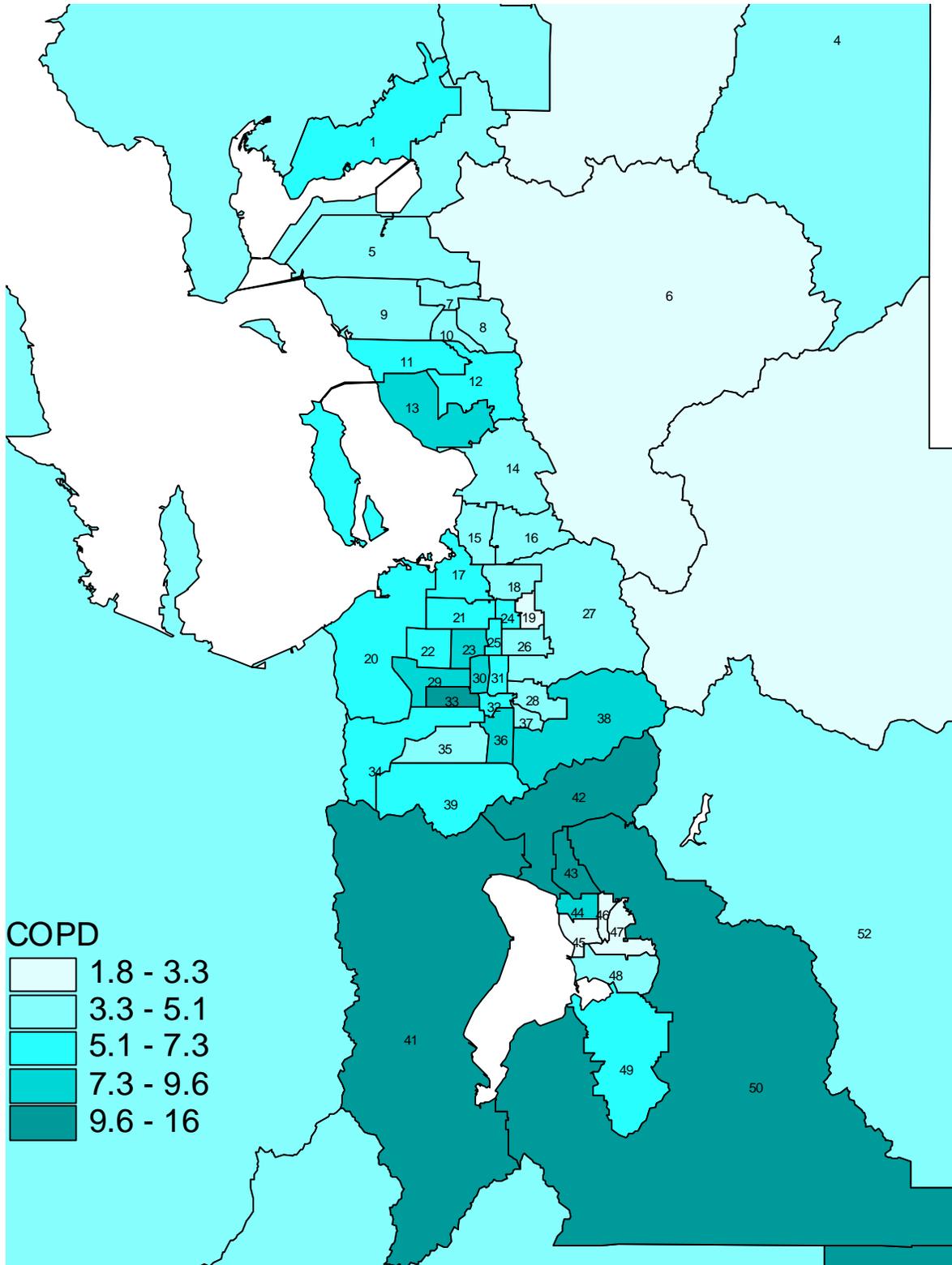
Figure 33: Average Annual Rates of Hospitalization for Chronic Obstructive Pulmonary Disease (COPD) per 10,000 Persons. Utah, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

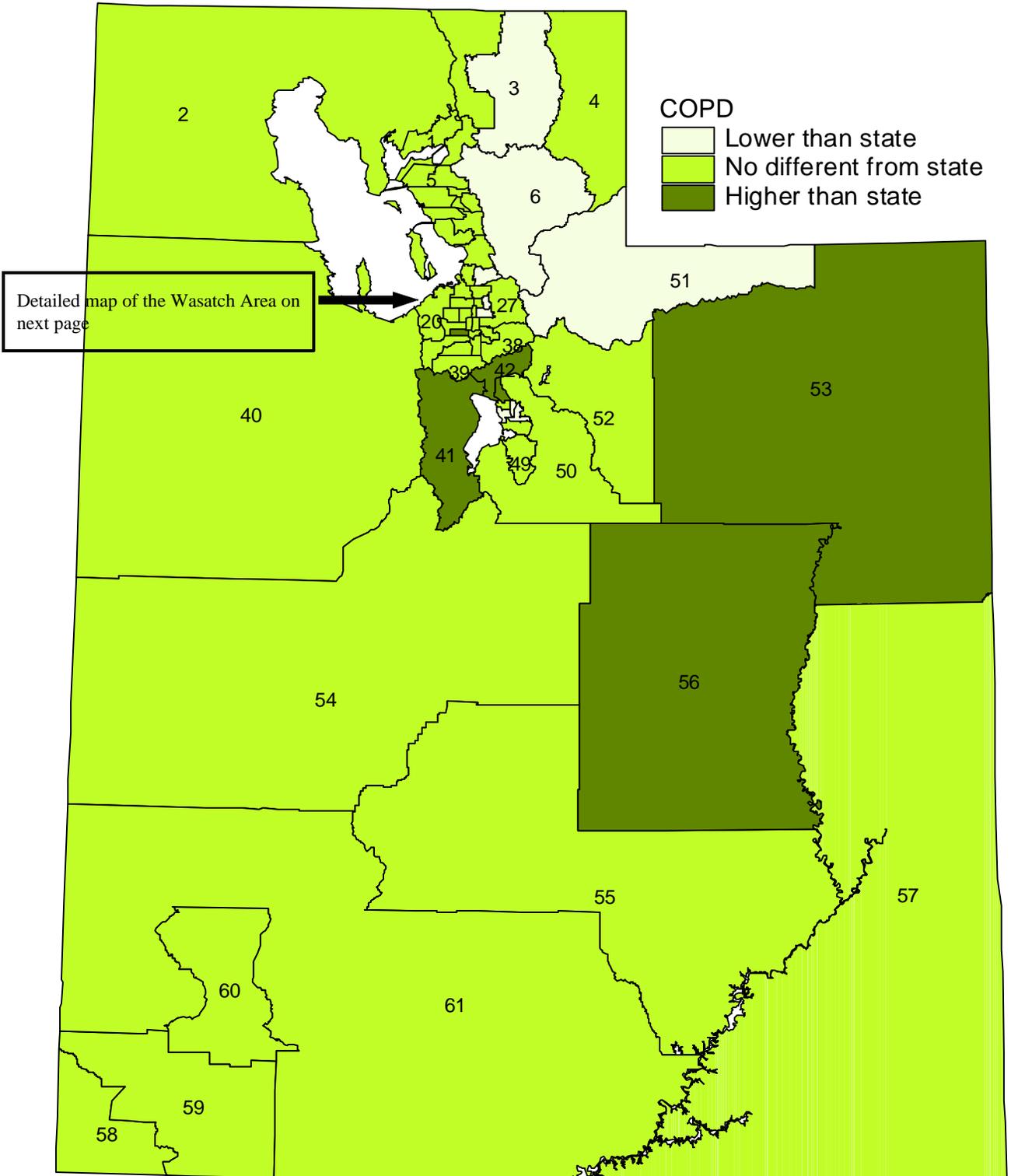
Figure 34: Average Annual Rates of Hospitalization for Chronic Obstructive Pulmonary Disease (COPD) per 10,000 Persons. Utah Wasatch Front, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each diagnosis was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

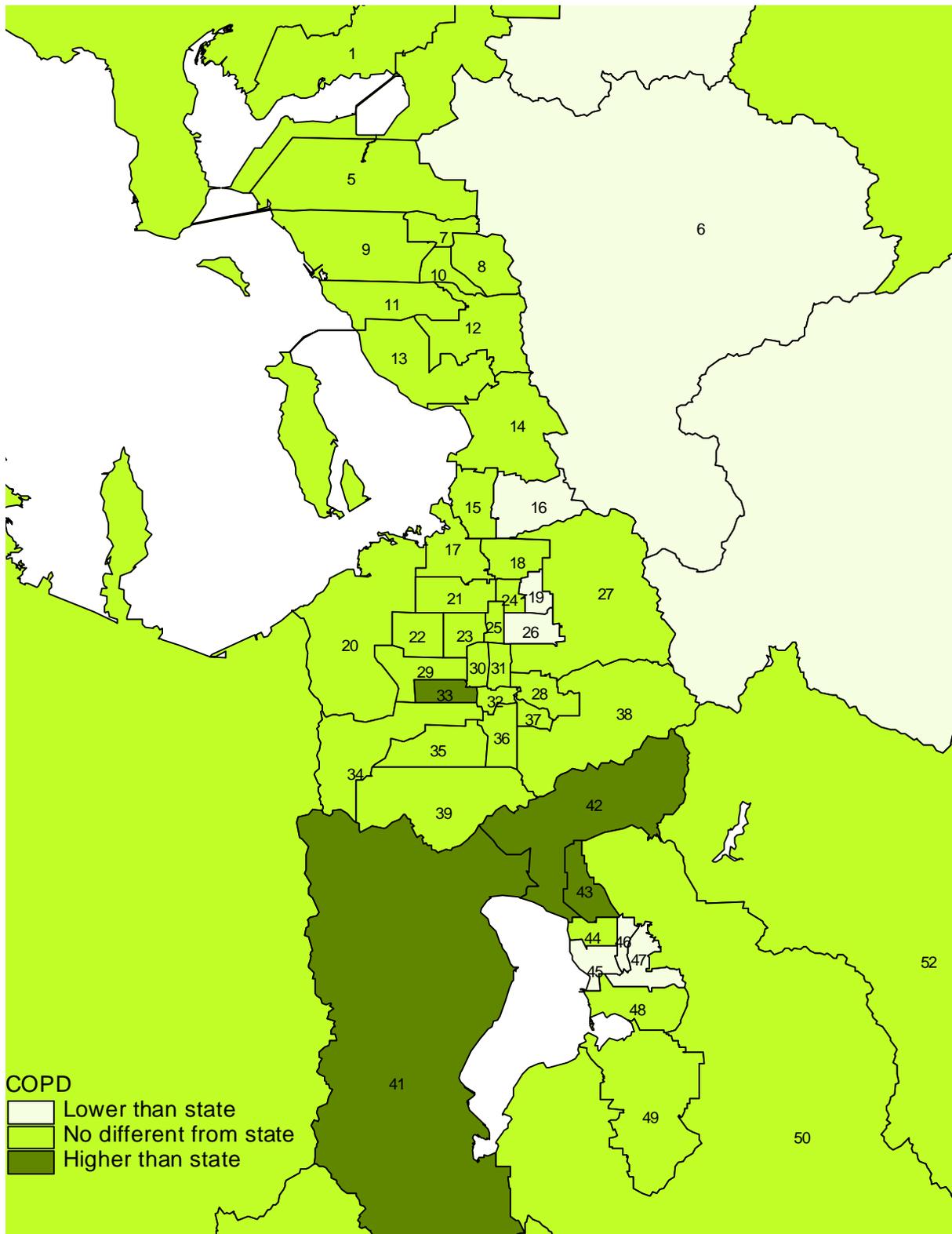
Figure 35: Average Annual Rates of Hospitalization for Chronic Obstructive Pulmonary Disease (COPD) per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

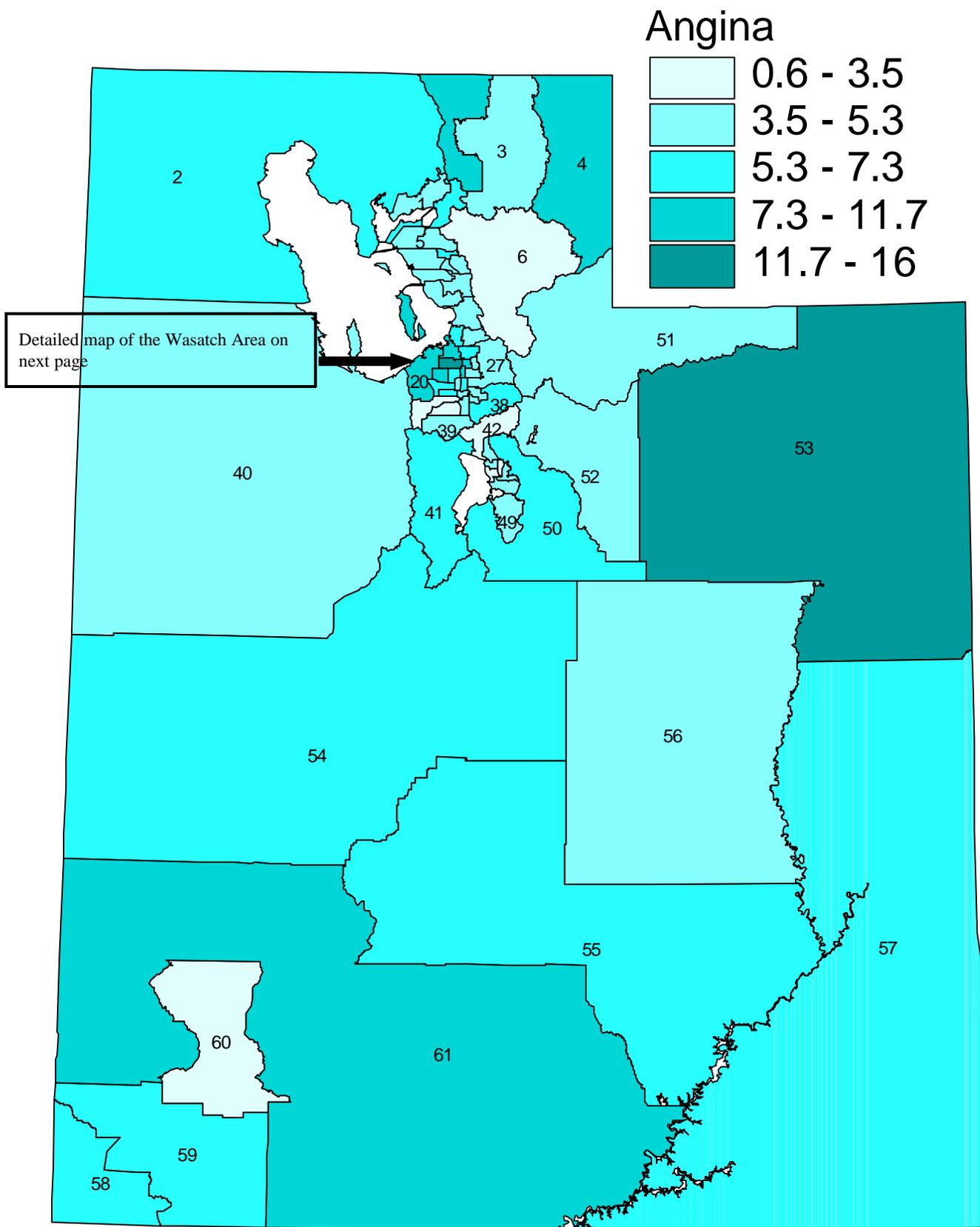
Figure 36: Average Annual Rates of Hospitalization for Chronic Obstructive Pulmonary Disease (COPD) per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

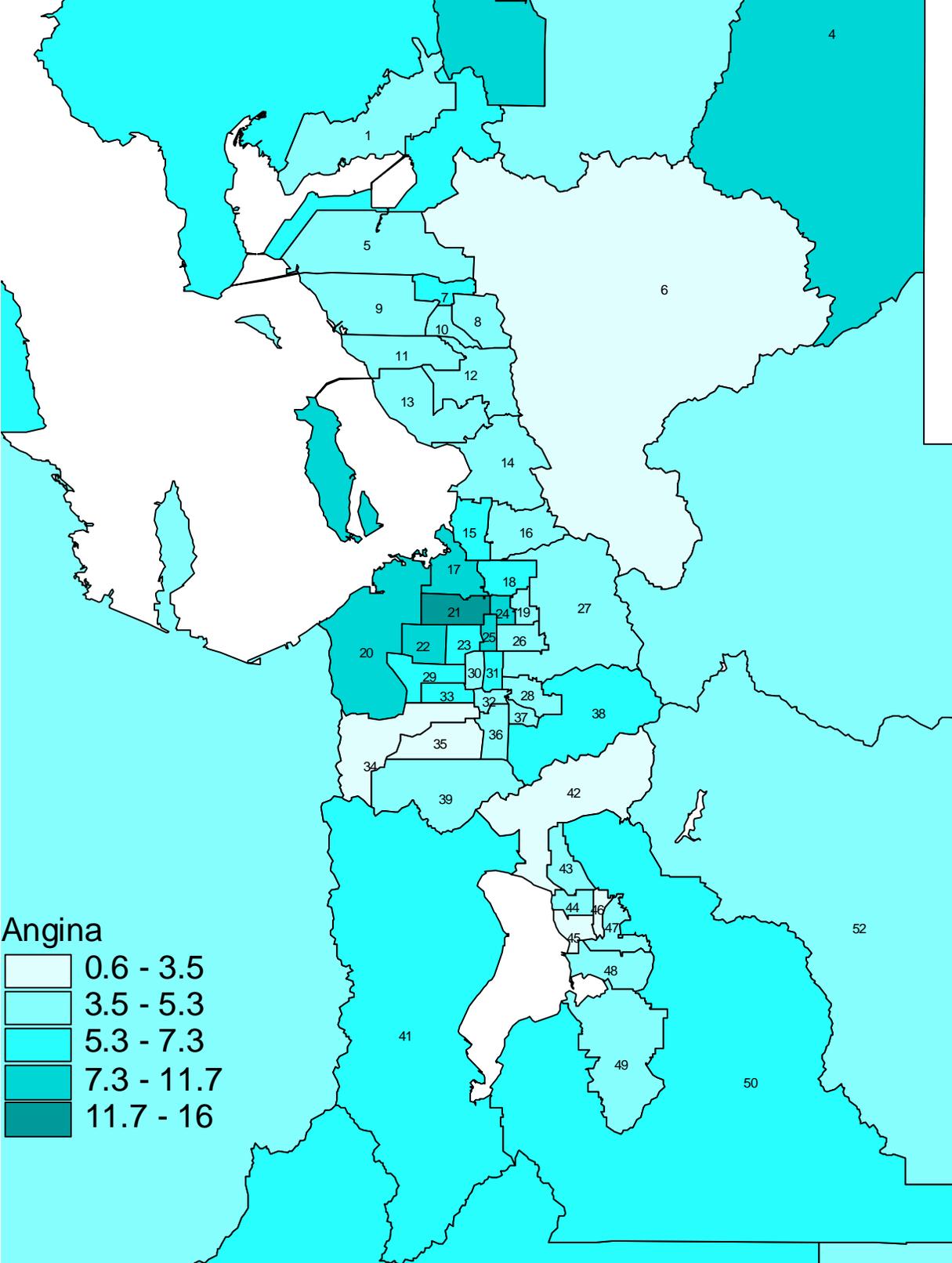
Figure 37: Average Annual Rates of Hospitalization for Angina per 10,000 Persons. Utah, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

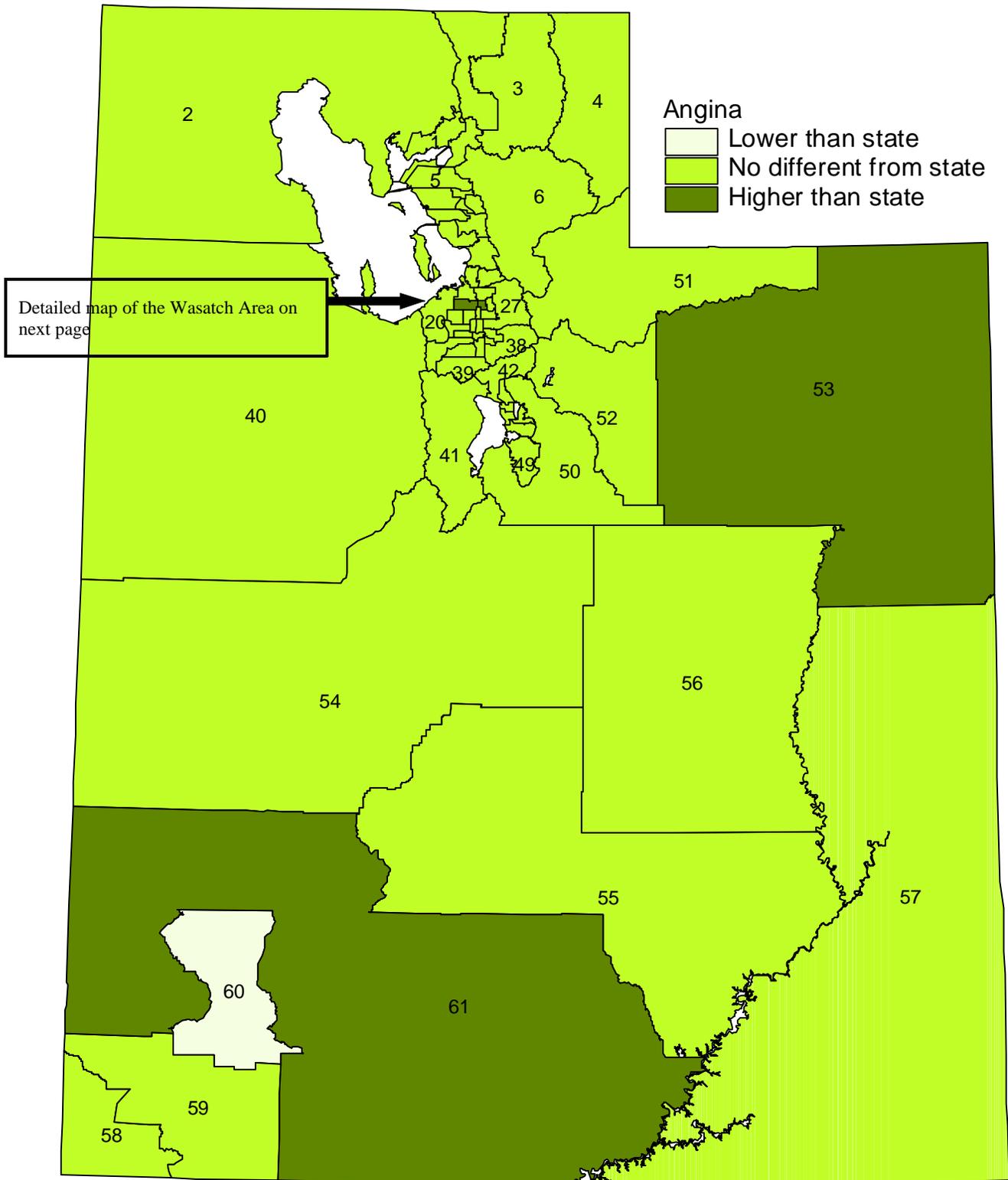
Figure 38: Average Annual Rates of Hospitalization for Angina per 10,000 Persons. Utah Wasatch Front, 1992-96.



Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

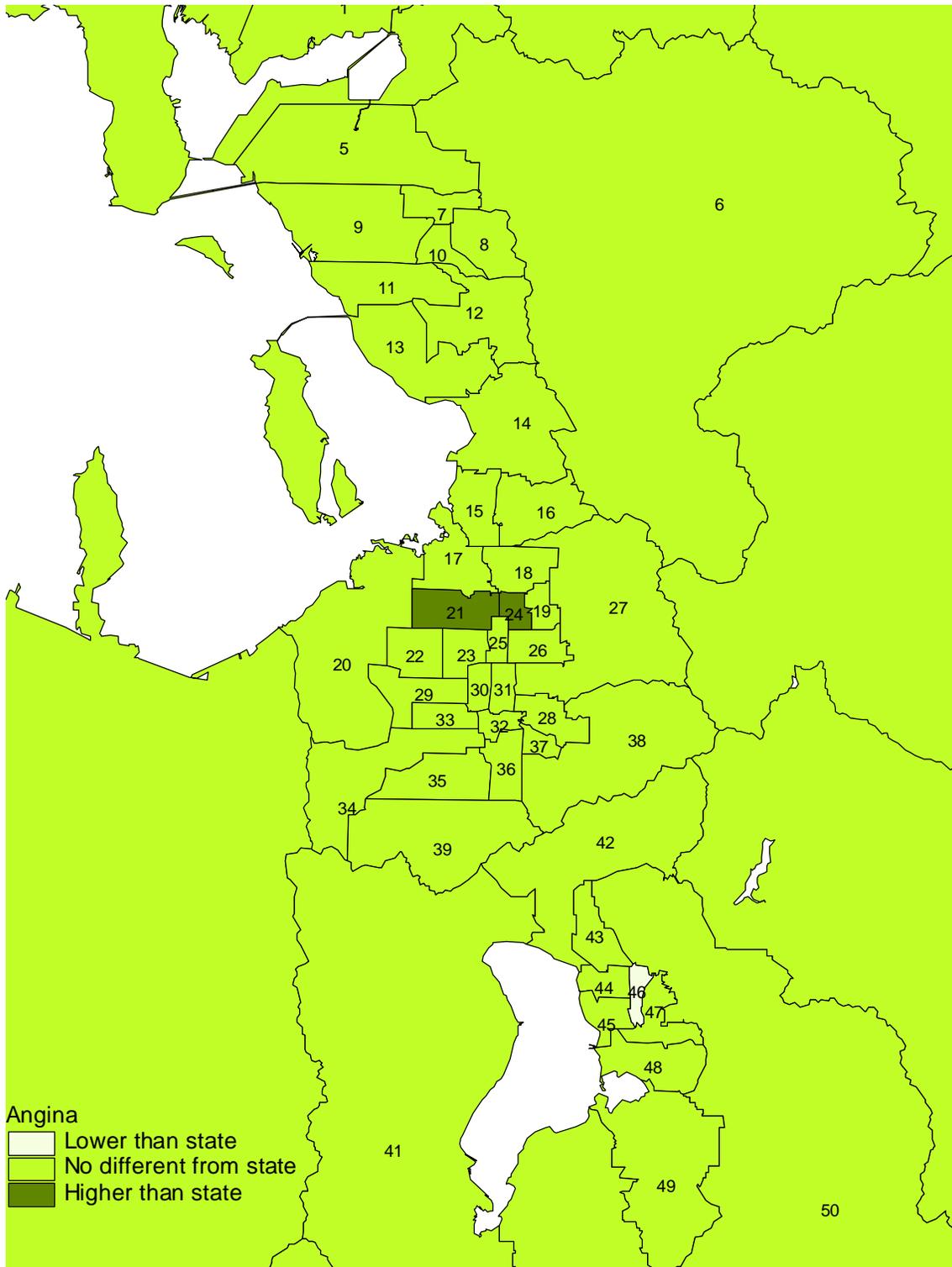
Figure 39: Average Annual Rates of Hospitalization for Angina per 10,000 Persons by Whether it is Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

Figure 40: Average Annual Rates of Hospitalization for Angina per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.

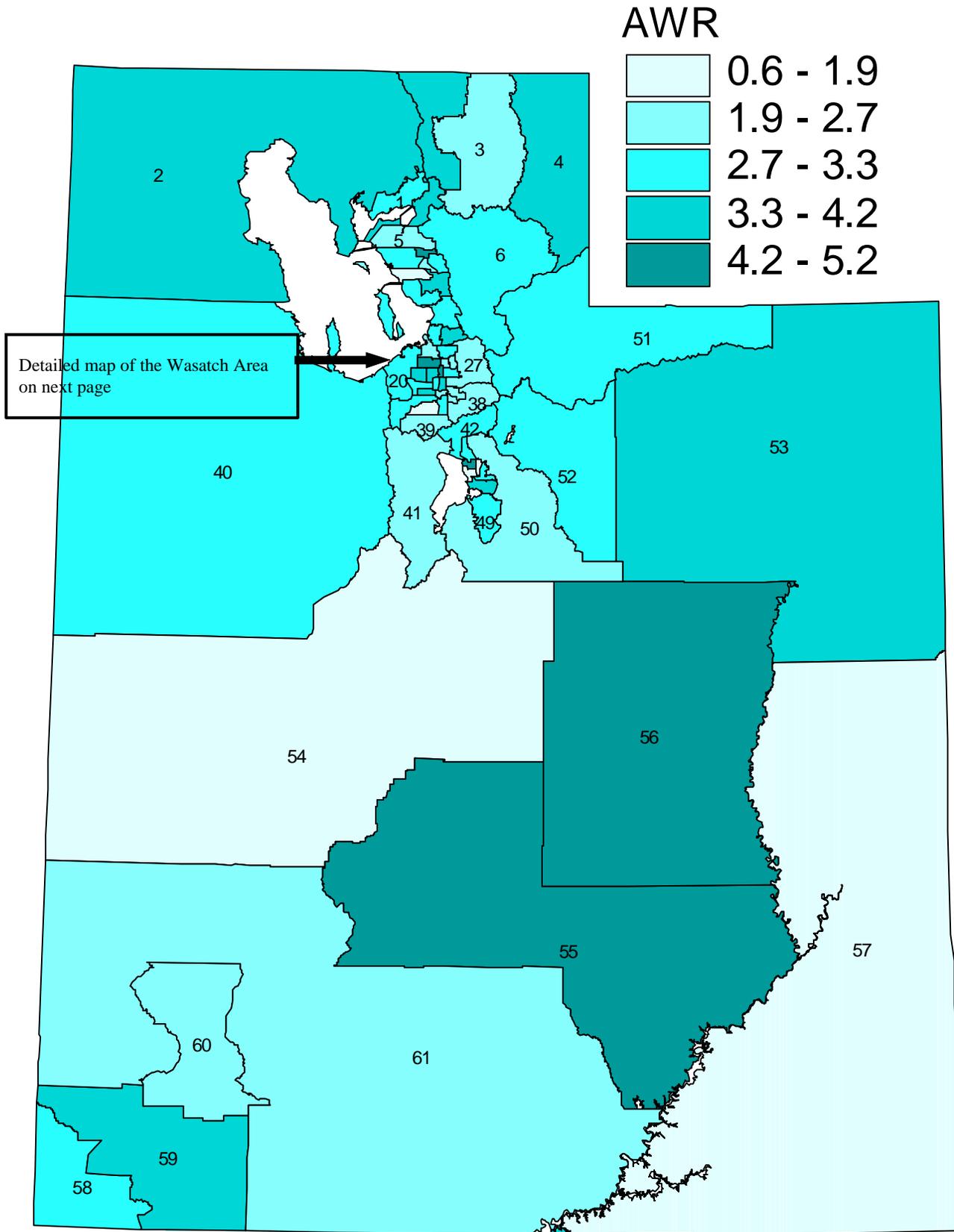


A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Rates are age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.

Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers on map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

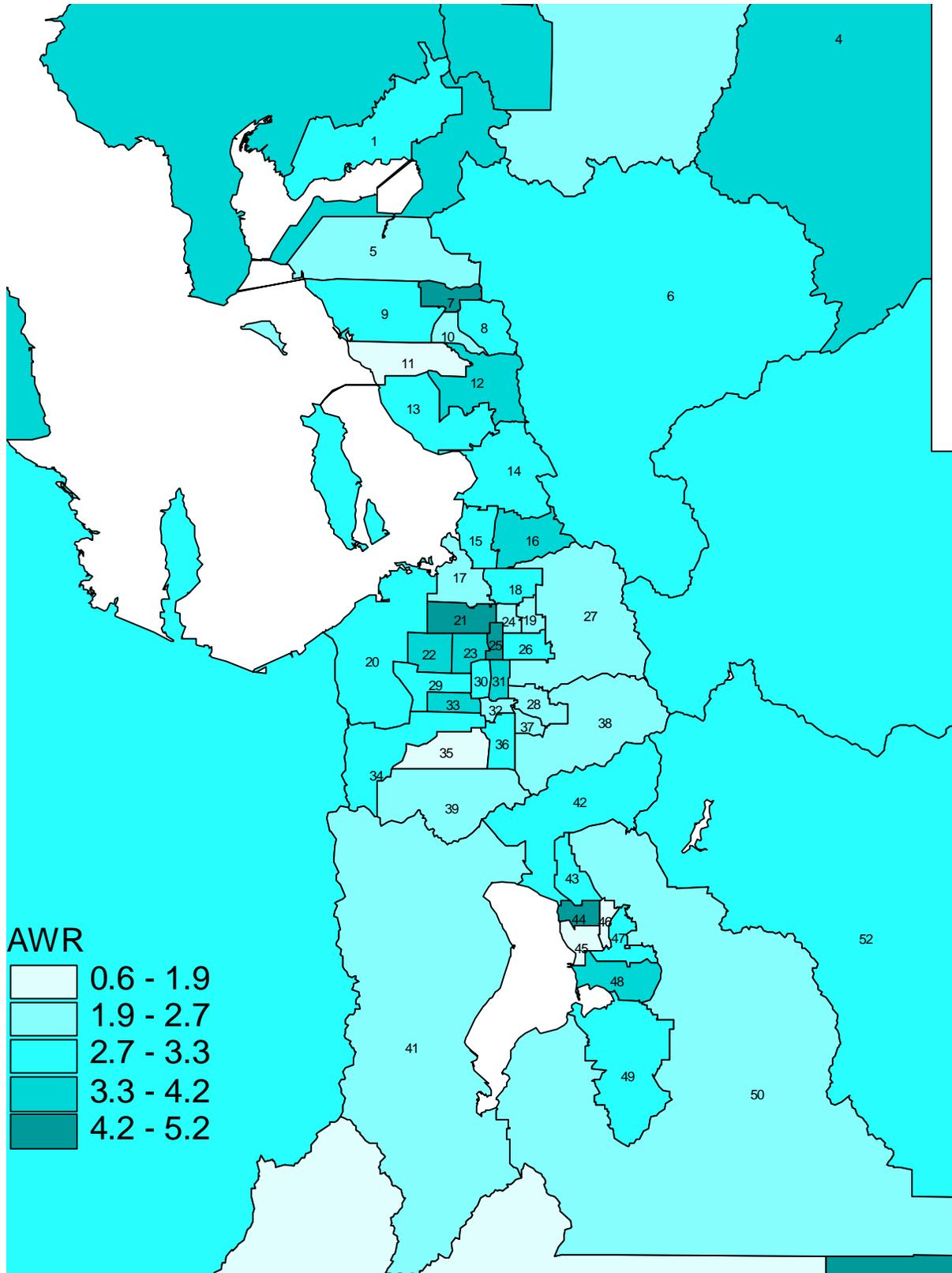
Figure 41: Average Annual Rates of Hospitalization for Appendicitis with Rupture (AWR) per 10,000 Persons. Utah, 1992-96.



Age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

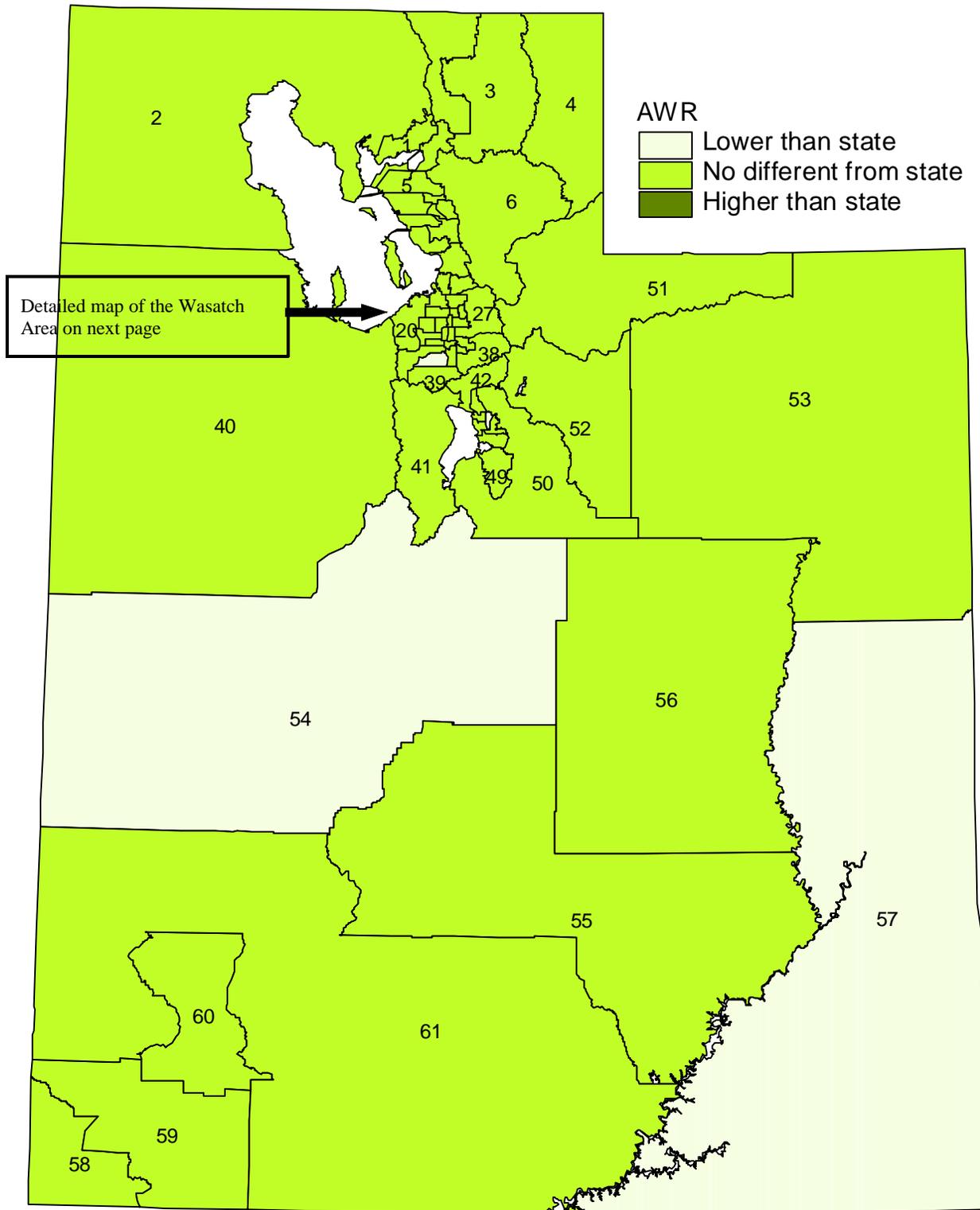
Figure 42: Average Annual Rates of Hospitalization for Appendicitis with Rupture (AWR) per 10,000 Persons.
Utah Wasatch Front, 1992-96.



Age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

Figure 43: Average Annual Rates of Hospitalization for Appendicitis with Rupture (AWR) per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.

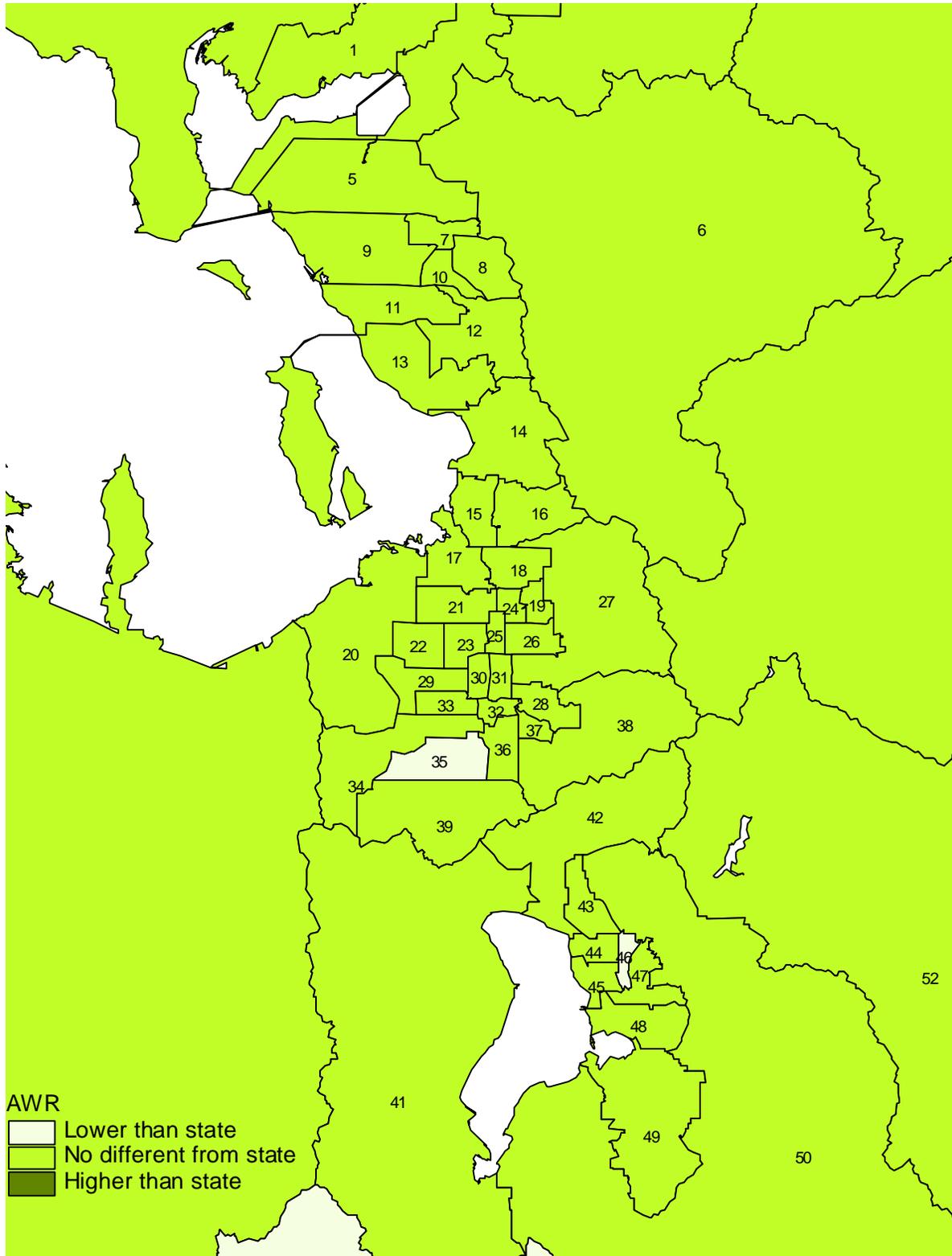


A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

Figure 44: Average Annual Hospitalization Rates for Appendicitis with Rupture (AWR) per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.

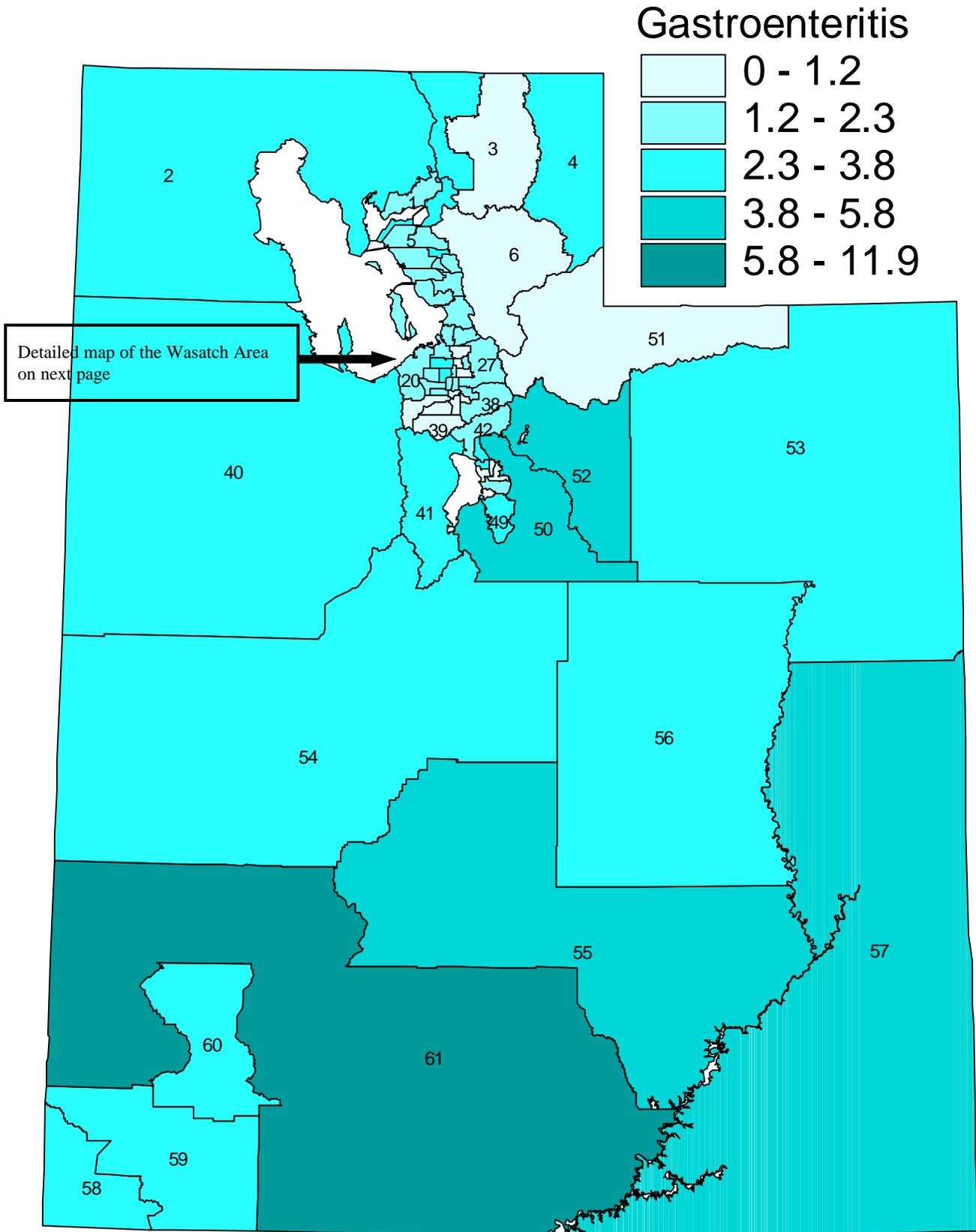
96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

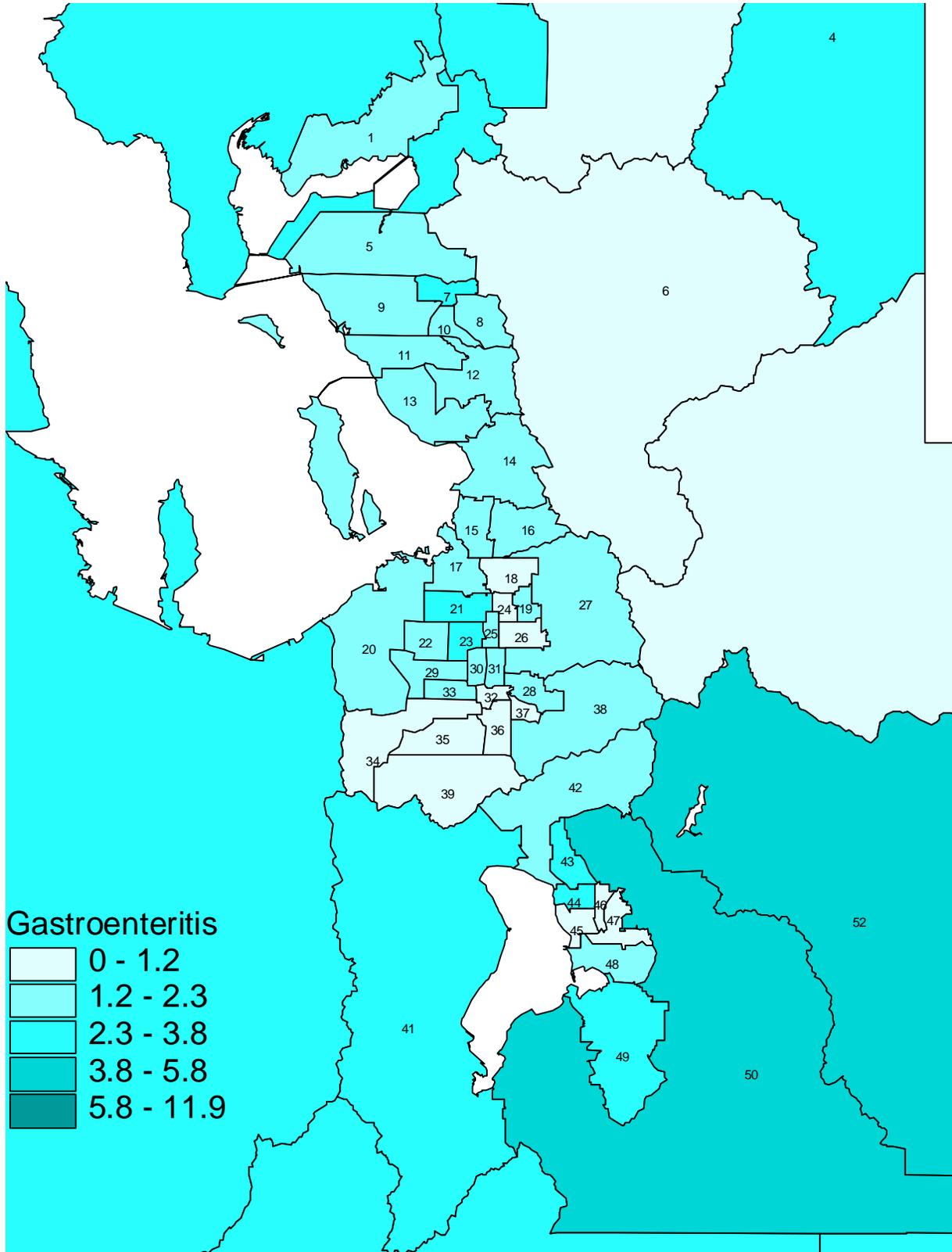
Figure 45: Average Annual Hospitalization Rates for Gastroenteritis per 10,000 Persons. Utah, 1992-96.



Age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

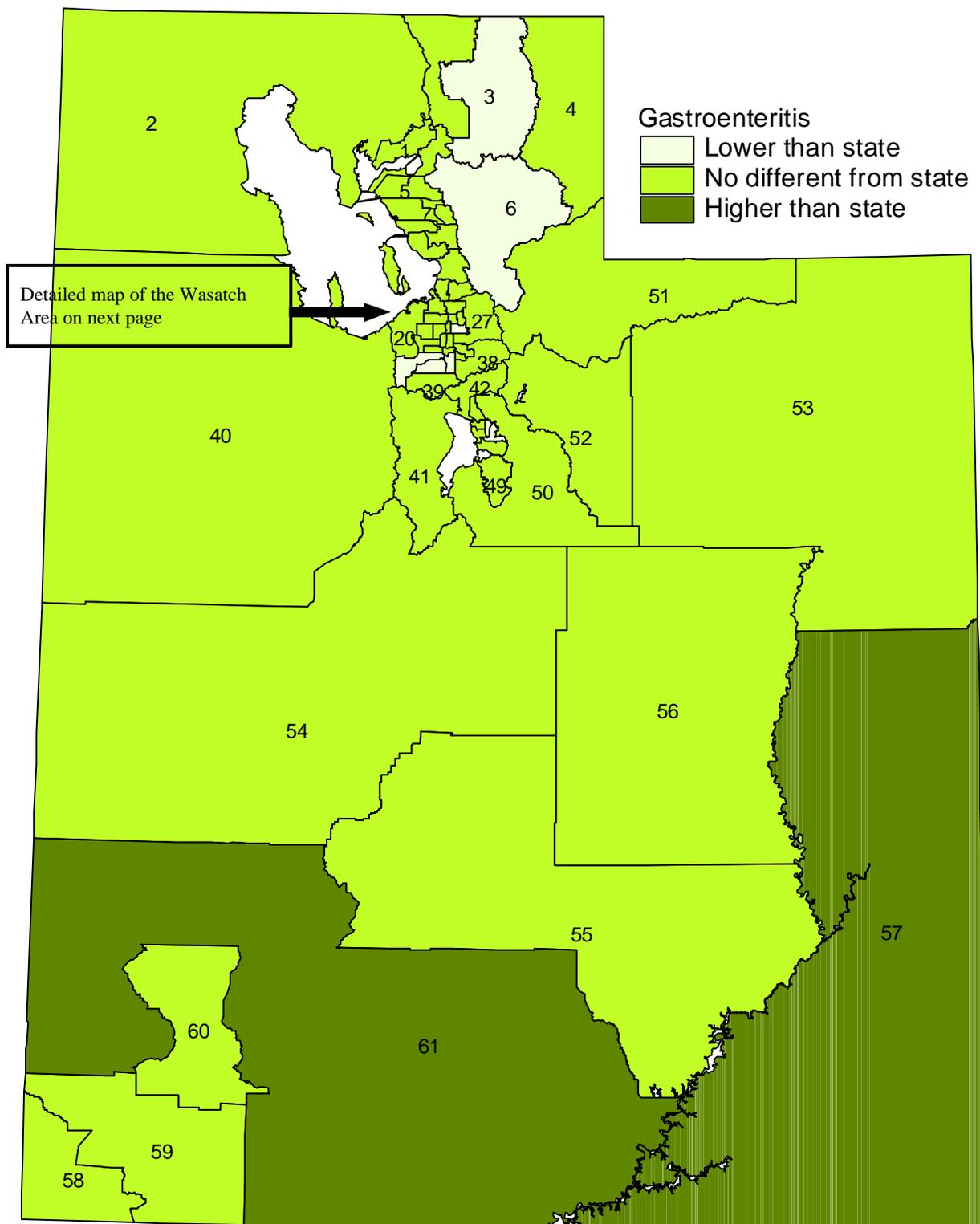
Figure 46: Average Annual Hospitalization Rates for Gastroenteritis per 10,000 Persons. Utah Wasatch Front, 1992-96.



Age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent rate ranges shown in the legend.

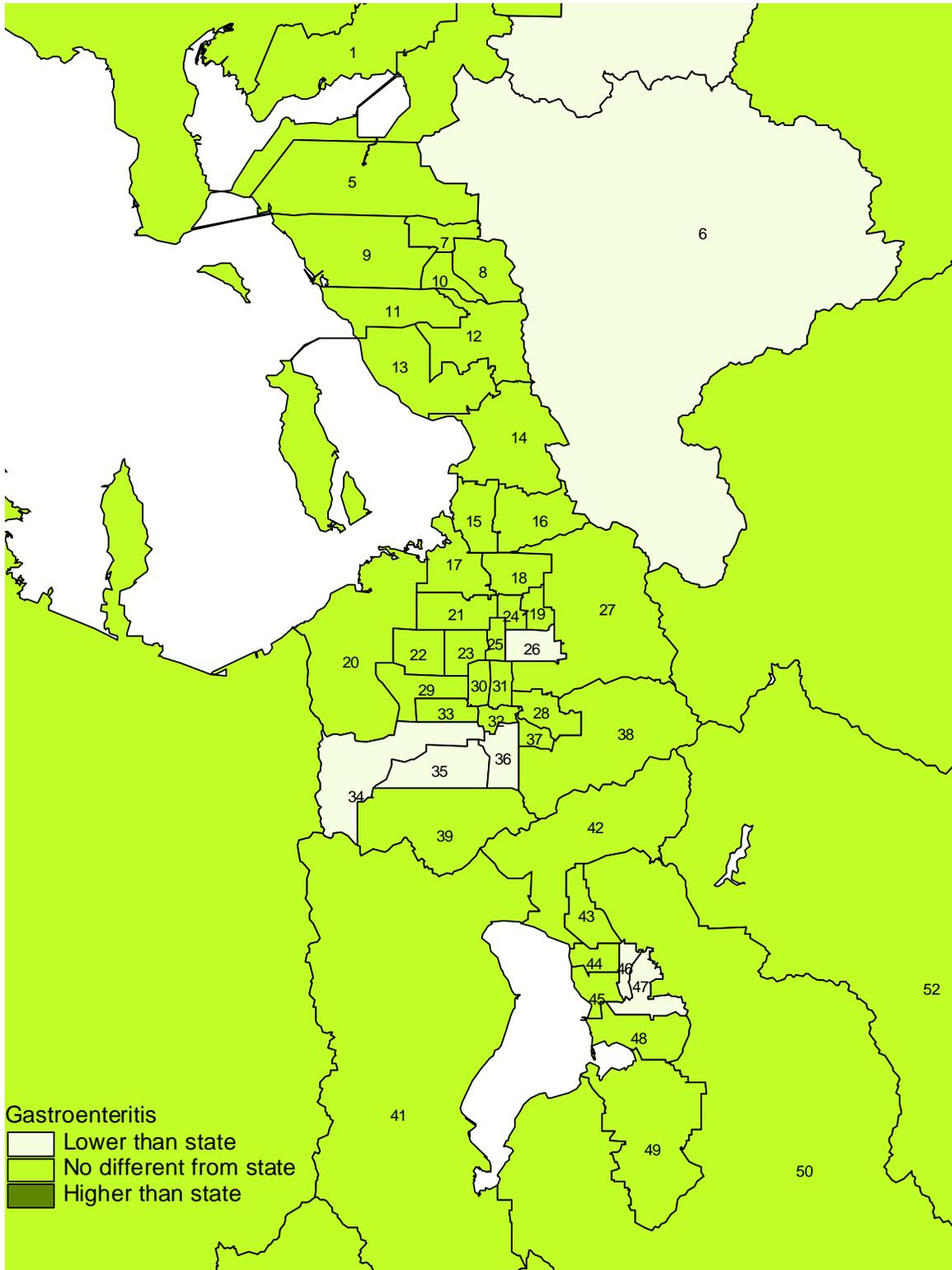
Figure 47: Average Annual Hospitalization Rates for Gastroenteritis per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence. Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

Figure 48: Average Annual Hospitalization Rates for Gastroenteritis per 10,000 Persons by Whether it was Higher, Lower, or not Different (Statistically) from the State Rate. Utah Wasatch Front, 1992-96.



A small area rate was considered different from the state rate if its 95% confidence interval did not include the state rate. Age-adjusted to the 2000 U.S. population using the direct method. Small area designation for each discharge was based on that patient's residence.
 Data Source: Utah Department of Health, Utah Hospital Inpatient Discharge Database, 1992-96.

Numbers in the map refer to area labels (See Table 3 or list on back cover). The shadings represent areas that were lower, higher or no different than the state rate as shown in the legend.

TABLE 1: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGES
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Bacterial pneumonia

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits***	
				Lower	Upper	
0	State Total	4,623	24.1	30.2	29.3	31.1
1	Brigham City	46	25.2	26.8	19.0	34.6
2	Other Box Elder Co.	57	28.4	34.3	25.1	43.5
3	Logan	106	18.9	24.1	19.2	29.0
4	Other Cache/Rich Co.	92	36.6	45.2	35.5	54.9
5	BenLomond	112	29.5	31.8	25.8	37.8
6	Morgan/East Weber Co.	36	12.0	17.0	11.0	23.0
7	Downtown Ogden	95	39.6	38.1	30.3	46.0
8	South Ogden	66	22.5	21.2	16.0	26.3
9	Roy/Hooper	55	16.0	24.6	17.5	31.7
10	Riverdale	56	24.5	25.8	19.0	32.6
11	Clearfield/Hill AFB	82	18.7	34.3	26.0	42.5
12	Layton	91	18.4	37.0	27.4	46.5
13	Syracuse/Kaysville	41	15.2	28.9	19.0	38.8
14	Farmington/Centerville	27	11.7	22.7	13.4	32.0
15	Woods Cross/No SL	32	19.4	29.6	18.3	40.9
16	Bountiful	86	20.1	23.1	18.2	28.0
17	Rose Park	76	30.6	35.3	27.1	43.4
18	Avenues	50	21.9	20.1	14.3	25.9
19	Foothill/U of U	41	18.5	15.8	10.8	20.7
20	Magna	48	25.1	38.2	26.7	49.6
21	Glendale	106	53.1	53.5	43.2	63.7
22	West Valley I	111	19.8	41.8	32.1	51.5
23	West Valley II	98	25.2	41.0	32.0	50.0
24	Downtown Salt Lake	153	32.6	29.7	24.6	34.8
25	South Salt Lake	75	34.2	33.3	25.5	41.1
26	Millcreek	141	25.9	20.5	17.0	24.0
27	Holladay	101	22.5	21.7	17.5	26.0
28	Cottonwood	57	13.1	19.6	14.2	25.1
29	Kearns	117	19.6	46.3	35.4	57.2
30	Taylorsville	52	16.4	25.9	18.2	33.7
31	Murray	77	26.4	28.7	22.1	35.2
32	Midvale	53	20.3	24.8	17.8	31.7
33	West Jordan No.	75	18.1	52.1	35.9	68.2
34	W. Jordan, Copperton	39	15.1	30.3	18.7	42.0
35	South Jordan	26	9.9	18.9	10.0	27.9

TABLE 1 CONTINUED

AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
BY UTAH SMALL AREAS
INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Bacterial pneumonia

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	81	16.3	27.4	20.9	33.8
37	Sandy, NE	28	10.3	34.3	17.9	50.8
38	Sandy, SE	26	8.2	29.0	13.5	44.4
39	Riverton/Draper	59	18.1	30.8	22.1	39.6
40	Tooele Co.	62	21.4	26.8	19.9	33.6
41	Lehi/Cedar Valley	32	24.0	31.8	20.5	43.1
42	American Fork/Alpine	79	25.2	33.5	25.7	41.4
43	Pleasant Grove/Lindon	59	24.8	39.9	28.8	51.1
44	North Orem	90	28.1	48.4	36.7	60.0
45	West Orem	66	26.5	39.5	29.1	50.0
46	East Orem	8	3.0	4.3	1.2	7.4
47	Provo/BYU	57	12.7	23.1	16.9	29.4
48	Provo South	88	19.3	33.7	25.9	41.4
49	Springville/Spanish Fork	154	37.4	44.9	37.5	52.2
50	Utah Co. South	91	49.6	61.5	48.4	74.7
51	Summit Co.	21	9.9	17.4	9.1	25.6
52	Wasatch Co.	28	24.5	30.2	18.9	41.6
53	Tri-county LHD	171	45.4	56.7	47.7	65.6
54	Juab/Millard/Sanpete Co.	125	33.8	34.1	28.0	40.2
55	Sevier/Piute/Wayne Co.	97	47.4	43.6	34.8	52.3
56	Carbon/Emery Co.	115	37.2	40.2	32.8	47.6
57	Grand/San Juan Co.	102	50.2	51.4	40.9	61.9
58	St. George	154	35.8	31.4	26.3	36.5
59	Other Washington Co.	97	41.3	39.2	31.2	47.2
60	Cedar City	42	19.5	24.9	17.0	32.7
61	Other Southwest Dist	135	73.9	69.4	57.6	81.2
	MISSING	0	.	.	.	.
	OUT OF STATE	316	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S.2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 2: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Congestive heart failure

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits***	
					Lower	Upper
0	State Total	2,222	11.6	16.9	16.2	17.6
1	Brigham City	17	9.1	10.5	5.5	15.6
2	Other Box Elder Co.	23	11.2	16.1	9.5	22.8
3	Logan	36	6.4	10.2	6.8	13.6
4	Other Cache/Rich Co.	31	12.2	19.4	12.5	26.2
5	Ben Lomond	70	18.4	22.2	17.0	27.4
6	Morgan/East Weber Co.	19	6.3	11.5	6.2	16.8
7	Downtown Ogden	57	23.8	22.1	16.2	27.9
8	South Ogden	53	17.9	16.4	11.9	20.8
9	Roy/Hooper	32	9.5	18.0	11.6	24.4
10	Riverdale	37	16.3	18.3	12.4	24.2
11	Clearfield/Hill AFB	54	12.4	29.2	21.3	37.2
12	Layton	43	8.7	22.7	15.1	30.3
13	Syracuse/Kaysville	25	9.3	21.4	12.8	30.0
14	Farmington/Centerville	9	3.8	8.7	2.8	14.6
15	Woods Cross/No SL	11	6.5	13.5	5.2	21.8
16	Bountiful	43	10.1	11.9	8.3	15.5
17	Rose Park	49	19.7	24.4	17.4	31.4
18	Avenues	33	14.4	12.6	8.1	17.0
19	Foothill/U of U	29	13.3	10.4	6.6	14.2
20	Magna	24	12.3	23.3	13.8	32.8
21	Glendale	42	21.0	21.4	14.9	27.9
22	West Valley I	46	8.2	27.1	18.6	35.7
23	West Valley II	36	9.4	18.2	11.9	24.5
24	Downtown Salt Lake	93	19.9	17.1	13.3	20.8
25	South Salt Lake	48	21.8	20.4	14.5	26.3
26	Millcreek	104	19.1	13.6	10.9	16.2
27	Holladay	57	12.8	11.9	8.8	15.0
28	Cottonwood	33	7.6	13.6	8.8	18.5
29	Kearns	50	8.4	31.6	21.6	41.5
30	Taylorsville	29	9.3	19.6	12.1	27.1
31	Murray	47	16.2	18.6	13.1	24.0
32	Midvale	28	10.6	14.4	8.9	19.9
33	West Jordan No.	21	5.1	25.7	13.8	37.6
34	W. Jordan, Copperton	19	7.3	22.9	12.2	33.6
35	South Jordan	7	2.7	9.0	2.0	16.0

TABLE 2 CONTINUED: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Congestive heart failure

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	40	8.0	17.3	11.8	22.8
37	Sandy, NE	8	3.0	17.3	4.9	29.7
38	Sandy, SE	13	4.1	23.4	9.0	37.8
39	Riverton/Draper	23	6.9	15.8	9.2	22.5
40	Tooele Co.	32	10.9	14.8	9.6	20.0
41	Lehi/Cedar Valley	17	12.7	19.6	10.4	28.8
42	American Fork/Alpine	34	11.0	19.2	12.7	25.6
43	Pleasant Grove/Lindon	24	10.1	20.6	12.2	29.1
44	North Orem	55	17.0	42.5	31.1	54.0
45	West Orem	28	11.0	24.0	15.1	33.0
46	East Orem	9	3.4	5.8	2.0	9.5
47	Provo/BYU	28	6.2	12.6	8.0	17.3
48	Provo South	55	12.1	26.3	19.2	33.5
49	Springville/Spanish Fork	57	13.9	19.8	14.6	24.9
50	Utah Co. South	28	15.1	23.1	14.5	31.7
51	Summit Co.	10	4.6	9.8	3.4	16.3
52	Wasatch Co.	9	7.8	10.7	3.7	17.6
53	Tri-county LHD	69	18.2	29.0	22.1	35.9
54	Juab/Millard/Sanpete Co.	39	10.6	11.0	7.6	14.5
55	Sevier/Piute/Wayne Co.	54	26.7	25.3	18.5	32.0
56	Carbon/Emery Co.	44	14.1	16.5	11.6	21.5
57	Grand/San Juan Co.	21	10.5	14.6	8.4	20.9
58	St. George	58	13.4	11.5	8.5	14.6
59	Other Washington Co.	43	18.3	17.8	12.4	23.2
60	Cedar City	11	5.1	8.2	3.3	13.1
61	Other Southwest Dist	73	39.8	35.8	27.6	44.0
MISSING		0	.	.	.	.
OUT OF STATE		195	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 3: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Diabetes

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits***	
					Lower	Upper
0	State Total	1,656	8.6	10.0	9.5	10.5
1	Brigham City	13	6.9	7.4	3.3	11.5
2	Other Box Elder Co.	16	7.9	9.2	4.6	13.9
3	Logan	22	4.0	4.7	2.6	6.8
4	Other Cache/Rich Co.	24	9.7	11.6	6.8	16.5
5	Ben Lomond	44	11.6	12.8	9.0	16.6
6	Morgan/East Weber Co.	14	4.6	5.7	2.4	8.9
7	Downtown Ogden	35	14.6	14.8	9.7	19.8
8	South Ogden	30	10.3	10.1	6.4	13.7
9	Roy/Hooper	34	9.8	11.8	7.4	16.1
10	Riverdale	23	10.1	11.0	6.5	15.5
11	Clearfield/Hill AFB	38	8.8	13.2	8.6	17.8
12	Layton	45	9.1	13.7	8.7	18.7
13	Syracuse/Kaysville	17	6.3	8.4	4.1	12.7
14	Farmington/Centerville	15	6.2	7.7	3.2	12.3
15	Woods Cross/No SL	7	4.0	4.9	0.8	9.0
16	Bountiful	32	7.6	7.9	5.2	10.7
17	Rose Park	38	15.2	17.1	11.5	22.6
18	Avenues	18	7.8	7.7	4.0	11.4
19	Foothill/U of U	15	6.9	6.4	3.1	9.7
20	Magna	19	9.9	13.3	7.0	19.6
21	Glendale	32	16.0	17.0	11.1	23.0
22	West Valley I	58	10.4	15.6	10.5	20.7
23	West Valley II	43	11.0	13.6	9.1	18.1
24	Downtown Salt Lake	56	12.0	12.9	9.3	16.6
25	South Salt Lake	45	20.5	20.2	14.1	26.4
26	Millcreek	63	11.6	10.7	8.0	13.4
27	Holladay	43	9.6	9.2	6.4	12.0
28	Cottonwood	32	7.4	8.7	5.5	11.8
29	Kearns	57	9.6	14.6	9.8	19.5
30	Taylorsville	39	12.5	13.5	9.0	18.0
31	Murray	35	12.0	11.8	7.8	15.9
32	Midvale	29	11.0	12.6	7.9	17.4
33	West Jordan No.	23	5.6	9.8	3.9	15.8
34	W. Jordan, Copperton	15	5.7	9.2	3.7	14.6
35	South Jordan	7	2.9	4.2	0.4	8.0

TABLE 3 CONTINUED

AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
BY UTAH SMALL AREAS
INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Diabetes

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	34	6.7	9.4	5.9	13.0
37	Sandy, NE	18	6.5	12.3	4.0	20.6
38	Sandy, SE	20	6.4	9.3	3.2	15.4
39	Riverton/Draper	22	6.9	8.2	4.3	12.1
40	Tooele Co.	31	10.6	11.6	7.4	15.8
41	Lehi/Cedar Valley	11	8.0	9.7	3.6	15.7
42	American Fork/Alpine	26	8.4	10.4	6.2	14.6
43	Pleasant Grove/Lindon	18	7.4	9.2	4.4	14.1
44	North Orem	30	9.5	13.6	8.2	19.1
45	West Orem	29	11.7	15.5	9.4	21.6
46	East Orem	5	1.9	2.5	0.3	4.7
47	Provo/BYU	20	4.4	6.3	3.2	9.5
48	Provo South	21	4.7	8.4	4.4	12.4
49	Springville/Spanish Fork	36	8.7	9.8	6.5	13.0
50	Utah Co. South	8	4.6	5.7	1.7	9.6
51	Summit Co.	10	4.8	6.3	2.1	10.6
52	Wasatch Co.	9	7.8	8.8	3.0	14.7
53	Tri-county LHD	51	13.4	16.2	11.6	20.8
54	Juab/Millard/Sanpete Co.	24	6.5	7.1	4.2	10.0
55	Sevier/Piute/Wayne Co.	22	10.8	10.6	6.1	15.2
56	Carbon/Emery Co.	33	10.6	11.0	7.1	14.8
57	Grand/San Juan Co.	13	6.3	7.5	3.3	11.8
58	St. George	35	8.2	8.2	5.4	11.0
59	Other Washington Co.	23	9.8	10.4	6.0	14.8
60	Cedar City	11	5.2	6.3	2.5	10.0
61	Other Southwest Dist	26	14.3	14.8	9.1	20.6
MISSING		0	.	.	.	.
OUT OF STATE		143	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 4: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Asthma

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
0	State Total	1,465	7.6	7.7	7.3	8.1
1	Brigham City	12	6.8	6.2	2.7	9.8
2	Other Box Elder Co.	14	7.2	7.7	3.6	11.8
3	Logan	34	6.2	6.2	4.0	8.5
4	Other Cache/Rich Co.	26	10.3	10.6	6.2	15.0
5	Ben Lomond	31	8.2	7.5	4.8	10.2
6	Morgan/East Weber Co.	12	3.9	4.0	1.6	6.4
7	Downtown Ogden	26	10.8	11.1	6.7	15.5
8	South Ogden	22	7.4	7.5	4.3	10.6
9	Roy/Hooper	20	5.8	6.4	3.3	9.5
10	Riverdale	14	6.0	5.8	2.7	8.8
11	Clearfield/Hill AFB	24	5.4	6.2	3.4	9.0
12	Layton	36	7.3	8.6	5.1	12.1
13	Syracuse/Kaysville	17	6.3	6.6	3.0	10.2
14	Farmington/Centerville	14	5.9	5.8	2.3	9.3
15	Woods Cross/No SL	11	6.5	6.7	1.9	11.5
16	Bountiful	25	5.8	5.7	3.4	7.9
17	Rose Park	35	14.0	13.8	9.0	18.5
18	Avenues	17	7.6	8.2	4.2	12.2
19	Foothill/U of U	11	4.8	4.8	1.8	7.7
20	Magna	25	13.2	14.1	8.1	20.2
21	Glendale	43	21.6	20.5	14.3	26.7
22	West Valley I	56	10.1	10.3	7.0	13.7
23	West Valley II	48	12.5	13.6	9.3	17.9
24	Downtown Salt Lake	47	10.0	11.4	8.0	14.9
25	South Salt Lake	32	14.7	15.1	9.7	20.6
26	Millcreek	44	8.1	7.7	5.4	10.0
27	Holladay	27	6.0	6.2	3.8	8.5
28	Cottonwood	26	6.0	6.7	4.0	9.3
29	Kearns	69	11.5	11.7	8.0	15.4
30	Taylorsville	30	9.4	10.2	6.2	14.1
31	Murray	27	9.2	9.3	5.7	12.8
32	Midvale	22	8.5	8.5	4.9	12.2
33	West Jordan No.	41	9.9	10.2	5.2	15.2
34	W. Jordan, Copperton	20	7.7	6.8	3.1	10.6
35	South Jordan	9	3.3	3.0	0.8	5.2

TABLE 4 CONTINUED

AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
BY UTAH SMALL AREAS
INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Asthma

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	35	7.0	7.4	4.7	10.2
37	Sandy, NE	11	4.1	6.9	1.1	12.7
38	Sandy, SE	10	3.2	5.1	0.0	10.1
39	Riverton/Draper	24	7.2	7.3	4.0	10.7
40	Tooele Co.	20	6.8	6.8	3.7	9.9
41	Lehi/Cedar Valley	8	5.8	5.9	1.5	10.3
42	American Fork/Alpine	19	6.0	6.9	3.6	10.2
43	Pleasant Grove/Lindon	12	5.2	5.8	2.2	9.5
44	North Orem	22	7.0	6.9	3.4	10.3
45	West Orem	18	7.0	7.6	3.6	11.7
46	East Orem	1	0.4	0.6	0.0	1.7
47	Provo/BYU	17	3.8	5.4	2.6	8.3
48	Provo South	27	5.9	8.6	4.7	12.5
49	Springville/Spanish Fork	34	8.3	8.1	5.2	10.9
50	Utah Co. South	15	8.0	7.9	3.5	12.2
51	Summit Co.	6	2.8	2.6	0.5	4.7
52	Wasatch Co.	5	4.0	3.8	0.2	7.3
53	Tri-county LHD	54	14.3	14.9	10.8	19.1
54	Juab/Millard/Sanpete Co.	21	5.6	5.5	3.0	7.9
55	Sevier/Piute/Wayne Co.	38	18.8	17.9	12.1	23.6
56	Carbon/Emery Co.	31	10.0	9.4	6.0	12.8
57	Grand/San Juan Co.	16	8.0	7.5	3.7	11.3
58	St. George	25	5.9	5.8	3.4	8.1
59	Other Washington Co.	12	5.3	5.3	2.2	8.4
60	Cedar City	7	3.4	3.7	0.9	6.5
61	Other Southwest Dist	16	8.5	7.8	3.8	11.8
	MISSING	0	.	.	.	.
	OUT OF STATE	65	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 5: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Dehydration

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
0	State Total	1,395	7.3	8.0	7.6	8.5
1	Brigham City	20	11.0	11.0	6.1	15.9
2	Other Box Elder Co.	16	7.9	8.8	4.3	13.4
3	Logan	48	8.6	9.4	6.5	12.3
4	Other Cache/Rich Co.	23	9.0	9.9	5.6	14.3
5	Ben Lomond	44	11.5	10.6	7.4	13.8
6	Morgan/East Weber Co.	16	5.2	6.1	2.8	9.4
7	Downtown Ogden	42	17.5	15.4	10.7	20.2
8	South Ogden	33	11.2	10.8	7.1	14.5
9	Roy/Hooper	32	9.3	9.5	5.8	13.1
10	Riverdale	30	13.2	12.9	8.2	17.5
11	Clearfield/Hill AFB	39	8.9	12.3	7.8	16.9
12	Layton	38	7.6	11.4	6.4	16.3
13	Syracuse/Kaysville	20	7.2	9.1	4.2	13.9
14	Farmington/Centerville	9	3.7	5.3	1.1	9.4
15	Woods Cross/No SL	6	3.4	3.7	0.2	7.2
16	Bountiful	19	4.5	4.8	2.6	7.0
17	Rose Park	17	6.7	7.3	3.6	10.9
18	Avenues	12	5.5	5.1	2.2	8.1
19	Foothill/U of U	15	6.8	5.8	2.8	8.8
20	Magna	12	6.2	8.0	2.9	13.2
21	Glendale	17	8.4	8.2	4.2	12.2
22	West Valley I	27	4.9	6.8	3.4	10.2
23	West Valley II	24	6.3	8.5	4.5	12.5
24	Downtown Salt Lake	35	7.6	6.9	4.4	9.3
25	South Salt Lake	16	7.5	6.3	3.2	9.5
26	Millcreek	41	7.5	6.0	4.1	7.9
27	Holladay	26	5.9	6.0	3.7	8.3
28	Cottonwood	15	3.3	4.6	2.0	7.1
29	Kearns	32	5.3	8.1	3.6	12.7
30	Taylorsville	18	5.6	7.4	3.4	11.4
31	Murray	21	7.2	7.3	4.1	10.5
32	Midvale	19	7.4	8.3	4.4	12.2
33	West Jordan No.	22	5.4	9.5	2.8	16.1
34	W. Jordan, Copperton	12	4.7	5.7	1.3	10.1
35	South Jordan	5	2.0	3.1	0.0	6.4

TABLE 5 CONTINUED

AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
BY UTAH SMALL AREAS
INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Dehydration

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	23	4.7	5.8	3.1	8.5
37	Sandy, NE	9	3.3	6.8	0.0	13.6
38	Sandy, SE	11	3.6	10.8	1.1	20.4
39	Riverton/Draper	18	5.5	7.1	3.2	10.9
40	Tooele Co.	12	4.3	4.7	2.0	7.4
41	Lehi/Cedar Valley	8	6.2	5.8	1.6	10.1
42	American Fork/Alpine	17	5.6	6.0	2.9	9.1
43	Pleasant Grove/Lindon	16	6.9	7.7	3.5	12.0
44	North Orem	35	11.0	15.0	8.7	21.2
45	West Orem	26	10.3	13.4	7.4	19.3
46	East Orem	4	1.5	1.7	0.0	3.5
47	Provo/BYU	25	5.6	8.7	5.0	12.3
48	Provo South	43	9.4	12.5	8.0	17.0
49	Springville/Spanish Fork	36	8.8	8.9	5.8	12.0
50	Utah Co. South	18	9.6	11.4	5.7	17.1
51	Summit Co.	7	3.2	3.7	0.5	6.9
52	Wasatch Co.	4	3.8	4.2	0.1	8.3
53	Tri-county LHD	72	19.0	21.0	15.8	26.2
54	Juab/Millard/Sanpete Co.	16	4.3	4.3	2.1	6.4
55	Sevier/Piute/Wayne Co.	19	9.5	9.1	5.0	13.2
56	Carbon/Emery Co.	22	7.0	7.5	4.3	10.7
57	Grand/San Juan Co.	20	9.8	10.1	5.4	14.8
58	St. George	47	11.0	10.2	7.2	13.2
59	Other Washington Co.	27	11.4	10.8	6.6	15.0
60	Cedar City	7	3.4	3.8	0.8	6.7
61	Other Southwest Dist	39	21.1	20.0	13.6	26.5
	MISSING	0	.	.	.	.
	OUT OF STATE	64	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 6: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Pyelonephritis/Urinary infection

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
0	State Total	1,323	6.9	8.2	7.7	8.7
1	Brigham City	9	4.7	4.9	1.6	8.3
2	Other Box Elder Co.	13	6.7	7.6	3.4	11.8
3	Logan	35	6.2	7.9	5.1	10.8
4	Other Cache/Rich Co.	26	10.2	12.1	7.1	17.0
5	Ben Lomond	29	7.5	7.9	5.0	10.9
6	Morgan/East Weber Co.	13	4.1	5.4	2.1	8.6
7	Downtown Ogden	26	10.8	10.1	6.1	14.1
8	South Ogden	19	6.3	5.9	3.2	8.6
9	Roy/Hooper	20	6.0	8.2	4.3	12.1
10	Riverdale	15	6.8	6.9	3.4	10.5
11	Clearfield/Hill AFB	19	4.4	6.1	2.9	9.3
12	Layton	26	5.1	8.9	4.3	13.4
13	Syracuse/Kaysville	13	4.6	6.9	2.4	11.4
14	Farmington/Centerville	11	4.6	7.5	2.5	12.6
15	Woods Cross/No SL	9	5.2	8.5	2.0	14.9
16	Bountiful	23	5.4	5.7	3.4	8.1
17	Rose Park	27	11.0	11.6	7.1	16.1
18	Avenues	17	7.4	6.5	3.3	9.8
19	Foothill/U of U	18	8.4	7.1	3.8	10.4
20	Magna	14	7.5	9.5	4.1	14.9
21	Glendale	32	15.9	15.7	10.2	21.3
22	West Valley I	31	5.5	9.7	5.1	14.3
23	West Valley II	32	8.2	11.8	7.1	16.6
24	Downtown Salt Lake	53	11.3	10.0	7.1	12.9
25	South Salt Lake	26	12.0	10.8	6.5	15.1
26	Millcreek	49	9.1	7.5	5.3	9.6
27	Holladay	35	7.9	7.8	5.2	10.4
28	Cottonwood	21	4.8	7.4	4.0	10.7
29	Kearns	33	5.5	11.4	5.8	16.9
30	Taylorsville	21	6.7	10.3	5.4	15.2
31	Murray	29	10.0	10.5	6.6	14.4
32	Midvale	23	8.9	10.1	5.8	14.5
33	West Jordan No.	24	5.9	11.3	4.5	18.2
34	W. Jordan, Copperton	15	5.8	10.1	3.8	16.4
35	South Jordan	5	1.8	2.5	0.0	5.3

TABLE 6 CONTINUED

AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
BY UTAH SMALL AREAS
INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Pyelonephritis/Urinary infection

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	24	4.9	7.5	4.2	10.8
37	Sandy, NE	11	3.9	10.9	1.8	19.9
38	Sandy, SE	11	3.6	10.4	1.1	19.7
39	Riverton/Draper	19	5.9	8.6	4.2	12.9
40	Tooele Co.	19	6.7	7.8	4.2	11.3
41	Lehi/Cedar Valley	12	9.0	11.4	4.7	18.1
42	American Fork/Alpine	17	5.6	7.2	3.6	10.9
43	Pleasant Grove/Lindon	17	7.0	10.7	5.1	16.4
44	North Orem	19	5.9	11.4	5.4	17.3
45	West Orem	15	6.1	8.7	3.8	13.7
46	East Orem	4	1.5	2.4	0.0	4.8
47	Provo/BYU	12	2.6	4.2	1.6	6.9
48	Provo South	19	4.3	6.8	3.4	10.2
49	Springville/Spanish Fork	37	8.9	9.8	6.4	13.1
50	Utah Co. South	18	9.8	11.9	6.1	17.7
51	Summit Co.	8	3.9	5.9	1.5	10.4
52	Wasatch Co.	12	10.6	12.4	5.3	19.4
53	Tri-county LHD	55	14.6	18.6	13.4	23.7
54	Juab/Millard/Sanpete Co.	28	7.7	7.7	4.8	10.7
55	Sevier/Piute/Wayne Co.	24	12.0	12.0	7.2	16.9
56	Carbon/Emery Co.	22	7.1	7.6	4.4	10.8
57	Grand/San Juan Co.	19	9.5	10.1	5.4	14.8
58	St. George	32	7.4	7.0	4.4	9.5
59	Other Washington Co.	20	8.5	8.7	4.8	12.6
60	Cedar City	13	6.2	7.0	3.0	11.0
61	Other Southwest Dist	29	15.7	14.6	9.2	20.0
	MISSING	0	.	.	.	.
	OUT OF STATE	66	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 7: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Perforated or bleeding ulcer

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
0	State Total	986	5.1	7.1	6.7	7.5
1	Brigham City	11	5.8	6.8	2.7	10.9
2	Other Box Elder Co.	8	3.9	5.2	1.5	8.8
3	Logan	20	3.6	5.9	3.3	8.5
4	Other Cache/Rich Co.	14	5.6	8.6	4.0	13.1
5	Ben Lomond	26	6.8	8.1	5.0	11.2
6	Morgan/East Weber Co.	10	3.3	4.9	1.8	8.1
7	Downtown Ogden	19	7.9	8.0	4.3	11.7
8	South Ogden	22	7.5	7.2	4.2	10.2
9	Roy/Hooper	16	4.6	7.3	3.5	11.0
10	Riverdale	13	5.7	6.5	3.0	10.0
11	Clearfield/Hill AFB	17	3.9	7.3	3.7	11.0
12	Layton	15	2.9	5.5	2.2	8.9
13	Syracuse/Kaysville	16	5.8	10.0	4.8	15.2
14	Farmington/Centerville	9	3.7	7.7	2.4	13.1
15	Woods Cross/No SL	4	2.5	3.8	0.0	7.5
16	Bountiful	22	5.2	6.0	3.5	8.6
17	Rose Park	17	6.9	8.1	4.2	12.0
18	Avenues	16	7.0	6.3	3.1	9.5
19	Foothill/U of U	14	6.3	5.3	2.5	8.2
20	Magna	11	5.6	9.3	3.6	15.1
21	Glendale	22	10.9	11.4	6.6	16.2
22	West Valley I	21	3.7	9.2	4.6	13.9
23	West Valley II	24	6.1	9.6	5.4	13.8
24	Downtown Salt Lake	42	9.0	9.0	6.1	11.9
25	South Salt Lake	23	10.4	10.8	6.2	15.4
26	Millcreek	48	8.8	6.8	4.8	8.8
27	Holladay	40	8.8	8.2	5.6	10.8
28	Cottonwood	24	5.5	8.0	4.5	11.4
29	Kearns	24	4.1	10.1	5.2	15.0
30	Taylorsville	17	5.5	9.1	4.5	13.6
31	Murray	29	9.8	10.3	6.4	14.2
32	Midvale	15	5.6	7.4	3.5	11.3
33	West Jordan No.	12	2.8	8.1	2.0	14.1
34	W. Jordan, Copperton	6	2.2	5.4	0.5	10.4
35	South Jordan	3	1.2	2.9	0.0	6.4

TABLE 7 CONTINUED: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Perforated or bleeding ulcer

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	21	4.2	7.7	4.2	11.2
37	Sandy, NE	8	3.0	7.3	1.0	13.6
38	Sandy, SE	9	2.9	9.4	1.6	17.2
39	Riverton/Draper	10	3.2	6.0	2.1	10.0
40	Tooele Co.	15	5.3	7.0	3.4	10.5
41	Lehi/Cedar Valley	5	3.6	5.4	0.6	10.2
42	American Fork/Alpine	13	4.2	6.8	3.0	10.5
43	Pleasant Grove/Lindon	9	4.0	7.4	2.5	12.4
44	North Orem	21	6.5	14.3	7.9	20.6
45	West Orem	13	5.3	10.4	4.7	16.1
46	East Orem	1	0.4	0.6	0.0	1.7
47	Provo/BYU	17	3.9	7.7	4.0	11.4
48	Provo South	13	2.8	6.1	2.5	9.6
49	Springville/Spanish Fork	24	5.9	8.2	4.9	11.5
50	Utah Co. South	11	6.2	9.3	3.9	14.7
51	Summit Co.	7	3.1	5.3	0.8	9.9
52	Wasatch Co.	6	5.0	6.7	1.2	12.2
53	Tri-county LHD	19	5.0	7.1	3.9	10.4
54	Juab/Millard/Sanpete Co.	14	3.7	4.1	1.9	6.3
55	Sevier/Piute/Wayne Co.	18	8.7	8.7	4.6	12.8
56	Carbon/Emery Co.	20	6.4	7.3	4.1	10.6
57	Grand/San Juan Co.	3	1.3	1.7	0.0	3.7
58	St. George	26	6.1	5.4	3.3	7.6
59	Other Washington Co.	17	7.0	7.2	3.7	10.8
60	Cedar City	9	4.2	6.2	2.1	10.3
61	Other Southwest Dist	13	7.0	6.8	3.0	10.5
	MISSING	0	.	.	.	.
	OUT OF STATE	65	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 8: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Cellulitis

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Lower	Limits*** Upper
0	State Total	872	4.6	5.5	5.1	5.8
1	Brigham City	8	4.5	4.9	1.5	8.2
2	Other Box Elder Co.	10	5.2	6.0	2.3	9.7
3	Logan	19	3.4	4.9	2.6	7.2
4	Other Cache/Rich Co.	15	6.1	8.0	3.8	12.2
5	Ben Lomond	18	4.7	5.1	2.7	7.5
6	Morgan/East Weber Co.	8	2.6	3.3	0.9	5.7
7	Downtown Ogden	16	6.7	7.1	3.6	10.7
8	South Ogden	12	4.0	3.9	1.6	6.1
9	Roy/Hooper	11	3.3	4.3	1.7	7.0
10	Riverdale	10	4.5	4.8	1.8	7.7
11	Clearfield/Hill AFB	15	3.3	5.2	2.2	8.2
12	Layton	16	3.3	4.6	1.9	7.3
13	Syracuse/Kaysville	8	2.9	4.7	1.0	8.3
14	Farmington/Centerville	7	3.2	4.3	0.8	7.7
15	Woods Cross/No SL	8	4.6	6.2	1.2	11.2
16	Bountiful	18	4.3	4.7	2.5	6.9
17	Rose Park	21	8.3	8.7	4.8	12.6
18	Avenues	14	6.1	5.9	2.7	9.1
19	Foothill/U of U	11	5.1	4.6	1.8	7.4
20	Magna	15	7.6	10.0	4.4	15.6
21	Glendale	30	15.2	16.0	10.2	21.7
22	West Valley I	29	5.2	8.7	4.5	12.9
23	West Valley II	18	4.6	6.2	3.0	9.4
24	Downtown Salt Lake	40	8.5	8.7	5.9	11.6
25	South Salt Lake	21	9.6	9.8	5.4	14.2
26	Millcreek	32	5.9	5.2	3.3	7.1
27	Holladay	21	4.7	4.6	2.6	6.6
28	Cottonwood	13	3.1	3.8	1.6	6.0
29	Kearns	21	3.5	6.9	2.9	10.9
30	Taylorsville	11	3.4	3.9	1.4	6.3
31	Murray	18	6.2	6.4	3.3	9.5
32	Midvale	10	3.9	4.5	1.6	7.3
33	West Jordan No.	15	3.7	7.3	2.1	12.4
34	W. Jordan, Copperton	7	2.6	3.5	0.3	6.8
35	South Jordan	4	1.6	3.3	0.0	6.9

TABLE 8 CONTINUED

AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
BY UTAH SMALL AREAS
INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Cellulitis

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	18	3.5	5.0	2.4	7.5
37	Sandy, NE	7	2.4	4.2	0.0	8.9
38	Sandy, SE	9	2.7	5.4	0.0	10.8
39	Riverton/Draper	14	4.4	6.6	2.8	10.5
40	Tooele Co.	12	4.3	4.7	2.0	7.4
41	Lehi/Cedar Valley	6	4.6	6.2	1.2	11.2
42	American Fork/Alpine	8	2.4	3.2	0.8	5.6
43	Pleasant Grove/Lindon	6	2.6	4.2	0.6	7.7
44	North Orem	9	2.9	5.1	1.5	8.8
45	West Orem	9	3.7	5.8	1.8	9.8
46	East Orem	1	0.4	0.6	0.0	1.7
47	Provo/BYU	13	2.8	4.4	1.7	7.1
48	Provo South	13	2.8	4.9	1.9	7.8
49	Springville/Spanish Fork	15	3.6	4.2	2.0	6.3
50	Utah Co. South	9	4.8	5.9	1.8	10.0
51	Summit Co.	6	2.6	3.7	0.3	7.1
52	Wasatch Co.	4	3.5	4.1	0.0	8.2
53	Tri-county LHD	45	11.8	14.0	9.7	18.3
54	Juab/Millard/Sanpete Co.	18	5.0	5.5	2.9	8.1
55	Sevier/Piute/Wayne Co.	12	5.7	5.9	2.4	9.3
56	Carbon/Emery Co.	15	4.9	5.3	2.6	8.1
57	Grand/San Juan Co.	12	5.8	6.7	2.8	10.6
58	St. George	25	5.8	6.0	3.6	8.5
59	Other Washington Co.	14	6.0	6.2	2.9	9.5
60	Cedar City	3	1.4	1.6	0.0	3.5
61	Other Southwest Dist	22	12.0	11.7	6.7	16.8
	MISSING	0	.	.	.	.
	OUT OF STATE	54	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 9: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Chronic obstructive pulmonary disease

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Lower	Limits*** Upper
0	State Total	830	4.3	6.0	5.6	6.5
1	Brigham City	5	2.9	3.2	0.4	5.9
2	Other Box Elder Co.	6	3.1	4.2	0.9	7.5
3	Logan	17	3.0	4.9	2.6	7.3
4	Other Cache/Rich Co.	12	4.9	7.7	3.4	12.1
5	Ben Lomond	25	6.5	7.4	4.5	10.4
6	Morgan/East Weber Co.	7	2.2	3.2	0.7	5.6
7	Downtown Ogden	27	11.1	11.9	7.2	16.5
8	South Ogden	20	6.6	6.3	3.5	9.2
9	Roy/Hooper	12	3.5	5.7	2.4	9.0
10	Riverdale	7	3.2	3.6	0.9	6.2
11	Clearfield/Hill AFB	19	4.3	8.3	4.4	12.2
12	Layton	27	5.4	11.1	6.5	15.7
13	Syracuse/Kaysville	6	2.3	4.7	0.9	8.5
14	Farmington/Centerville	3	1.1	2.5	0.0	5.5
15	Woods Cross/No SL	4	2.3	3.9	0.0	8.0
16	Bountiful	8	2.0	2.1	0.7	3.6
17	Rose Park	24	9.7	11.6	6.9	16.2
18	Avenues	11	4.8	4.7	1.8	7.6
19	Foothill/U of U	6	2.8	2.3	0.5	4.1
20	Magna	15	7.6	13.5	6.6	20.5
21	Glendale	30	15.2	15.0	9.6	20.5
22	West Valley I	19	3.4	9.2	4.7	13.8
23	West Valley II	27	6.8	12.0	7.3	16.7
24	Downtown Salt Lake	33	7.0	7.7	4.9	10.5
25	South Salt Lake	23	10.4	10.8	6.3	15.4
26	Millcreek	22	4.1	3.4	1.9	4.8
27	Holladay	21	4.7	4.1	2.3	5.8
28	Cottonwood	12	2.7	4.2	1.7	6.6
29	Kearns	29	4.9	14.1	8.2	20.0
30	Taylorsville	16	5.0	7.8	3.9	11.7
31	Murray	24	8.1	7.8	4.6	11.0
32	Midvale	13	5.1	6.7	3.0	10.3
33	West Jordan No.	10	2.5	10.6	3.5	17.7
34	W. Jordan, Copperton	4	1.5	4.0	0.0	8.3
35	South Jordan	2	0.7	2.1	0.0	5.4

TABLE 9 CONTINUED

AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
BY UTAH SMALL AREAS
INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Chronic obstructive pulmonary disease

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	13	2.6	5.5	2.4	8.5
37	Sandy, NE	4	1.3	5.3	0.0	11.8
38	Sandy, SE	3	0.8	4.5	0.0	10.5
39	Riverton/Draper	9	2.7	6.6	2.2	10.9
40	Tooele Co.	19	6.6	8.4	4.6	12.2
41	Lehi/Cedar Valley	4	2.7	4.1	0.0	8.4
42	American Fork/Alpine	7	2.2	3.7	0.9	6.4
43	Pleasant Grove/Lindon	11	4.7	8.6	3.3	13.8
44	North Orem	14	4.3	9.6	4.3	14.9
45	West Orem	7	2.9	5.6	1.5	9.7
46	East Orem	3	1.1	1.1	0.0	2.4
47	Provo/BYU	8	1.8	3.3	0.9	5.6
48	Provo South	26	5.8	12.9	7.8	18.1
49	Springville/Spanish Fork	17	4.2	5.7	3.0	8.4
50	Utah Co. South	10	5.5	8.1	3.1	13.0
51	Summit Co.	2	0.8	1.6	0.0	4.0
52	Wasatch Co.	7	6.4	8.6	2.4	14.8
53	Tri-county LHD	29	7.6	11.1	7.0	15.2
54	Juab/Millard/Sanpete Co.	12	3.4	3.6	1.6	5.6
55	Sevier/Piute/Wayne Co.	8	4.0	3.8	1.2	6.4
56	Carbon/Emery Co.	13	4.3	4.8	2.2	7.5
57	Grand/San Juan Co.	11	5.6	7.0	2.9	11.2
58	St. George	22	5.0	4.4	2.5	6.3
59	Other Washington Co.	13	5.4	5.3	2.3	8.2
60	Cedar City	3	1.5	2.2	0.0	4.6
61	Other Southwest Dist	14	7.8	6.8	3.2	10.4
	MISSING	0	.	.	.	.
	OUT OF STATE	68	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 10: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Angina

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
0	State Total	792	4.1	5.9	5.4	6.3
1	Brigham City	10	5.6	6.5	2.5	10.4
2	Other Box Elder Co.	6	3.2	4.4	1.0	7.8
3	Logan	11	2.0	3.3	1.3	5.2
4	Other Cache/Rich Co.	7	2.6	4.1	1.0	7.3
5	Ben Lomond	14	3.8	4.7	2.3	7.1
6	Morgan/East Weber Co.	3	1.1	1.8	0.0	3.8
7	Downtown Ogden	11	4.7	5.1	2.0	8.1
8	South Ogden	12	4.2	4.0	1.8	6.3
9	Roy/Hooper	9	2.7	4.9	1.6	8.2
10	Riverdale	9	4.0	4.6	1.6	7.5
11	Clearfield/Hill AFB	15	3.4	7.0	3.3	10.7
12	Layton	18	3.7	6.5	3.4	9.7
13	Syracuse/Kaysville	11	4.0	8.3	3.2	13.5
14	Farmington/Centerville	5	2.0	4.3	0.2	8.4
15	Woods Cross/No SL	4	2.4	4.6	0.0	9.5
16	Bountiful	14	3.3	3.6	1.7	5.6
17	Rose Park	13	5.3	6.3	2.8	9.7
18	Avenues	10	4.2	3.9	1.4	6.5
19	Foothill/U of U	6	2.8	2.5	0.5	4.4
20	Magna	7	3.9	7.0	1.9	12.2
21	Glendale	14	6.9	7.1	3.3	10.9
22	West Valley I	15	2.8	6.7	2.8	10.7
23	West Valley II	17	4.3	8.0	3.9	12.1
24	Downtown Salt Lake	26	5.6	5.6	3.2	7.9
25	South Salt Lake	14	6.5	7.0	3.2	10.8
26	Millcreek	26	4.8	3.7	2.2	5.1
27	Holladay	22	4.9	4.6	2.6	6.5
28	Cottonwood	13	3.1	4.5	1.9	7.1
29	Kearns	18	3.1	9.0	4.1	13.9
30	Taylorsville	14	4.6	7.7	3.4	12.1
31	Murray	17	6.0	6.2	3.2	9.2
32	Midvale	12	4.5	5.9	2.4	9.3
33	West Jordan No.	15	3.5	16.0	7.0	25.1
34	W. Jordan, Copperton	8	2.9	7.3	1.8	12.8
35	South Jordan	5	1.8	5.1	0.2	10.0

TABLE 10 CONTINUED

AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
BY UTAH SMALL AREAS
INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Angina

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	22	4.4	9.0	5.1	12.8
37	Sandy, NE	4	1.4	4.4	0.0	10.1
38	Sandy, SE	7	2.2	8.8	0.5	17.2
39	Riverton/Draper	14	4.2	9.2	4.2	14.2
40	Tooele Co.	11	3.9	4.7	1.9	7.5
41	Lehi/Cedar Valley	13	9.3	14.3	6.4	22.1
42	American Fork/Alpine	22	7.1	12.1	7.0	17.1
43	Pleasant Grove/Lindon	16	6.6	12.2	6.0	18.3
44	North Orem	14	4.3	10.4	4.8	16.1
45	West Orem	7	2.7	5.2	1.3	9.2
46	East Orem	3	1.1	2.0	0.0	4.2
47	Provo/BYU	4	0.9	1.9	0.0	3.8
48	Provo South	9	1.9	4.5	1.4	7.6
49	Springville/Spanish Fork	16	3.9	5.5	2.8	8.1
50	Utah Co. South	15	8.0	11.8	5.8	17.9
51	Summit Co.	3	1.2	2.3	0.0	5.2
52	Wasatch Co.	4	3.3	4.2	0.0	8.5
53	Tri-county LHD	37	9.8	14.4	9.7	19.1
54	Juab/Millard/Sanpete Co.	15	4.0	4.5	2.2	6.8
55	Sevier/Piute/Wayne Co.	19	9.5	9.6	5.3	13.9
56	Carbon/Emery Co.	38	12.4	14.6	9.9	19.3
57	Grand/San Juan Co.	5	2.7	3.5	0.5	6.5
58	St. George	25	5.8	4.9	2.9	7.0
59	Other Washington Co.	13	5.6	5.8	2.6	8.9
60	Cedar City	9	4.3	6.4	2.3	10.6
61	Other Southwest Dist	18	10.1	9.2	4.9	13.4
	MISSING	0	.	.	.	.
	OUT OF STATE	85	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 11: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Appendicitis with rupture

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Lower	Limits*** Upper
0	State Total	582	3.0	3.0	2.8	3.3
1	Brigham City	5	3.0	3.0	0.4	5.5
2	Other Box Elder Co.	8	3.9	3.8	1.0	6.6
3	Logan	12	2.2	2.3	0.9	3.8
4	Other Cache/Rich Co.	11	4.4	4.2	1.6	6.9
5	Ben Lomond	10	2.7	2.6	1.0	4.3
6	Morgan/East Weber Co.	8	2.8	2.8	0.8	4.7
7	Downtown Ogden	12	5.1	5.2	2.2	8.1
8	South Ogden	9	3.0	3.0	1.0	5.0
9	Roy/Hooper	11	3.1	3.2	1.1	5.4
10	Riverdale	6	2.5	2.5	0.4	4.6
11	Clearfield/Hill AFB	10	2.2	1.9	0.7	3.2
12	Layton	15	3.0	3.8	1.1	6.5
13	Syracuse/Kaysville	8	2.9	2.9	0.7	5.0
14	Farmington/Centerville	8	3.2	3.1	0.6	5.7
15	Woods Cross/No SL	5	3.2	3.0	0.3	5.8
16	Bountiful	16	3.7	3.6	1.8	5.4
17	Rose Park	7	2.8	2.7	0.7	4.8
18	Avenues	7	3.1	3.3	0.7	5.8
19	Foothill/U of U	5	2.4	2.2	0.3	4.2
20	Magna	5	2.8	3.0	0.2	5.8
21	Glendale	10	4.8	5.0	1.8	8.2
22	West Valley I	20	3.5	3.5	1.6	5.3
23	West Valley II	15	4.0	3.7	1.8	5.6
24	Downtown Salt Lake	12	2.5	2.5	1.0	4.1
25	South Salt Lake	10	4.8	4.9	1.8	8.1
26	Millcreek	16	3.0	3.0	1.5	4.5
27	Holladay	12	2.7	2.7	1.2	4.3
28	Cottonwood	12	2.7	2.6	1.1	4.1
29	Kearns	19	3.2	2.9	1.4	4.4
30	Taylorsville	10	3.0	2.9	1.0	4.9
31	Murray	10	3.6	3.5	1.4	5.7
32	Midvale	7	2.6	2.7	0.6	4.8
33	West Jordan No.	13	3.1	3.9	1.0	6.7
34	W. Jordan, Copperton	8	3.1	3.2	0.6	5.8
35	South Jordan	4	1.5	1.4	0.0	3.0

TABLE 11 CONTINUED

AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
BY UTAH SMALL AREAS
INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Appendicitis with rupture

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Lower	Limits*** Upper
36	Sandy Center	14	2.9	2.8	1.2	4.4
37	Sandy, NE	5	2.0	2.3	0.0	5.0
38	Sandy, SE	8	2.4	2.4	0.1	4.8
39	Riverton/Draper	12	3.7	3.4	1.4	5.5
40	Tooele Co.	9	3.0	3.0	0.9	5.0
41	Lehi/Cedar Valley	3	2.2	2.2	0.0	4.9
42	American Fork/Alpine	10	3.1	2.9	0.9	4.9
43	Pleasant Grove/Lindon	9	3.7	3.3	0.9	5.6
44	North Orem	15	4.7	4.8	2.0	7.6
45	West Orem	10	4.0	3.5	1.1	5.8
46	East Orem	1	0.4	0.6	0.0	1.7
47	Provo/BYU	10	2.3	3.2	0.9	5.5
48	Provo South	12	2.6	3.6	1.1	6.0
49	Springville/Spanish Fork	13	3.2	2.9	1.2	4.6
50	Utah Co. South	6	3.4	2.7	0.5	4.9
51	Summit Co.	7	3.3	3.3	0.8	5.8
52	Wasatch Co.	4	3.5	2.9	0.0	5.9
53	Tri-county LHD	14	3.6	3.5	1.6	5.5
54	Juab/Millard/Sanpete Co.	5	1.5	1.5	0.2	2.7
55	Sevier/Piute/Wayne Co.	10	5.0	5.0	1.9	8.2
56	Carbon/Emery Co.	14	4.7	4.7	2.2	7.2
57	Grand/San Juan Co.	3	1.4	1.3	0.0	2.9
58	St. George	15	3.4	3.4	1.6	5.2
59	Other Washington Co.	10	4.2	4.2	1.5	7.0
60	Cedar City	6	2.7	2.7	0.4	4.9
61	Other Southwest Dist	5	2.7	2.7	0.3	5.0
MISSING		0	.	.	.	.
OUT OF STATE		34	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 12: AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
 BY UTAH SMALL AREAS
 INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Gastroenteritis

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Lower	Confidence Upper***
0	State Total	364	1.9	2.0	1.8	2.2
1	Brigham City	2	1.3	1.3	0.0	3.0
2	Other Box Elder Co.	5	2.4	2.4	0.1	4.7
3	Logan	5	0.9	0.9	0.0	1.8
4	Other Cache/Rich Co.	6	2.5	2.4	0.4	4.5
5	Ben Lomond	6	1.7	1.6	0.3	2.9
6	Morgan/East Weber Co.	2	0.7	0.6	0.0	1.4
7	Downtown Ogden	6	2.5	2.6	0.5	4.7
8	South Ogden	5	1.6	1.6	0.2	3.0
9	Roy/Hooper	5	1.3	1.5	0.0	3.0
10	Riverdale	4	1.9	2.2	0.1	4.2
11	Clearfield/Hill AFB	8	1.8	2.0	0.4	3.5
12	Layton	6	1.3	1.4	0.2	2.6
13	Syracuse/Kaysville	3	1.1	1.3	0.0	3.1
14	Farmington/Centerville	3	1.4	1.8	0.0	4.0
15	Woods Cross/No SL	3	1.7	1.8	0.0	4.1
16	Bountiful	7	1.6	1.6	0.4	2.8
17	Rose Park	6	2.3	2.3	0.4	4.2
18	Avenues	2	0.9	1.0	0.0	2.5
19	Foothill/U of U	3	1.5	1.3	0.0	2.7
20	Magna	3	1.7	1.7	0.0	3.8
21	Glendale	6	2.8	2.8	0.5	5.1
22	West Valley I	9	1.5	1.9	0.3	3.6
23	West Valley II	9	2.3	2.5	0.7	4.2
24	Downtown Salt Lake	6	1.2	1.1	0.1	2.0
25	South Salt Lake	4	1.9	1.8	0.0	3.6
26	Millcreek	8	1.4	1.2	0.3	2.0
27	Holladay	8	1.7	1.7	0.5	3.0
28	Cottonwood	7	1.6	2.0	0.4	3.7
29	Kearns	9	1.5	2.0	0.1	3.8
30	Taylorsville	4	1.1	1.3	0.0	2.6
31	Murray	4	1.5	1.7	0.1	3.3
32	Midvale	3	1.2	1.2	0.0	2.5
33	West Jordan No.	4	1.1	1.5	0.0	3.6
34	W. Jordan, Copperton	1	0.5	0.4	0.0	1.2
35	South Jordan	1	0.4	0.6	0.0	1.8

TABLE 12 CONTINUED

AVERAGE ANNUAL NUMBERS AND RATES (PER 10,000 PERSONS) OF HOSPITAL DISCHARGE
BY UTAH SMALL AREAS
INPATIENT DISCHARGES, UTAH HOSPITALS: 1992-96

Gastroenteritis

AREA OF RESIDENCE		DISCHARGE RATES (PER 10,000 PERSONS)				
#	Name	# of Cases*	Crude	Adjusted**	Confidence Limits*** Lower	Upper
36	Sandy Center	4	0.8	0.9	0.0	1.9
37	Sandy, NE	2	0.8	1.1	0.0	2.9
38	Sandy, SE	2	0.6	2.1	0.0	6.1
39	Riverton/Draper	4	1.3	1.7	0.0	3.6
40	Tooele Co.	7	2.5	2.7	0.7	4.7
41	Lehi/Cedar Valley	3	2.5	3.1	0.0	6.6
42	American Fork/Alpine	5	1.7	2.0	0.2	3.7
43	Pleasant Grove/Lindon	7	2.9	3.3	0.6	5.9
44	North Orem	9	2.8	3.7	0.6	6.8
45	West Orem	4	1.6	1.8	0.0	3.7
46	East Orem	0	0.0	0.0	0.0	0.0
47	Provo/BYU	3	0.8	0.7	0.0	1.7
48	Provo South	5	1.2	1.6	0.0	3.2
49	Springville/Spanish Fork	14	3.5	3.1	1.4	4.8
50	Utah Co. South	10	5.2	4.2	1.4	7.1
51	Summit Co.	2	1.0	1.1	0.0	2.8
52	Wasatch Co.	5	4.5	5.4	0.6	10.1
53	Tri-county LHD	11	2.8	3.1	1.1	5.1
54	Juab/Millard/Sanpete Co.	13	3.5	3.7	1.6	5.8
55	Sevier/Piute/Wayne Co.	9	4.5	4.5	1.5	7.5
56	Carbon/Emery Co.	11	3.7	3.8	1.5	6.0
57	Grand/San Juan Co.	12	6.1	5.8	2.4	9.1
58	St. George	14	3.2	3.2	1.4	5.0
59	Other Washington Co.	6	2.6	2.8	0.5	5.0
60	Cedar City	6	2.7	2.4	0.3	4.4
61	Other Southwest Dist	22	11.8	11.9	6.8	17.0
MISSING		0	.	.	.	.
OUT OF STATE		29	.	.	.	.

SOURCE: Utah Hospital Inpatient Discharge Database, 1992-96, Utah Department of Health.

* Average annual number of hospital discharges by first diagnosis.

** Adjusted rates are age adjusted to the U.S. 2000 population using direct method.

*** Confidence limits are for adjusted rates.

TABLE 13: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Bacterial pneumonia

Area of Residence		___HOSPITAL CHARGES (DOLLARS) ___			___DAYS OF STAY___		
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	4,620	36,528,021	8,148	19.07	24,960	5.44
1	Brigham City	46	290,420	6,369	15.93	186	4.03
2	Other Box Elder Co.	57	374,170	6,658	18.62	249	4.38
3	Logan	104	640,733	6,149	11.49	472	4.52
4	Other Cache/Rich Co.	92	501,515	5,451	19.95	393	4.29
5	Ben Lomond	112	1,016,522	9,258	26.77	609	5.44
6	Morgan/East Weber Co.	36	336,056	9,335	11.04	202	5.55
7	Downtown Ogden	95	724,290	7,907	30.23	530	5.59
8	South Ogden	66	471,226	7,161	15.96	338	5.11
9	Roy/Hooper	55	404,808	7,469	11.84	274	5.03
10	Riverdale	56	437,708	7,929	19.23	307	5.52
11	Clearfield/Hill AFB	82	581,766	7,147	13.34	398	4.90
12	Layton	91	829,516	9,258	16.67	530	5.80
13	Syracuse/Kaysville	41	346,188	8,527	12.73	219	5.32
14	Farmington/Centerville	27	190,242	7,152	8.12	132	4.82
15	Woods Cross/No SL	32	320,951	10,221	19.26	189	5.88
16	Bountiful	86	721,188	8,689	16.90	524	6.15
17	Rose Park	76	670,798	9,778	26.91	427	5.62
18	Avenues	50	523,220	11,276	23.13	308	6.46
19	Foothill/U of U	41	456,153	12,132	20.73	276	6.89
20	Magna	48	443,676	9,480	23.10	244	5.08
21	Glendale	106	965,488	9,913	48.45	618	5.96
22	West Valley I	111	913,525	8,667	16.38	622	5.67
23	West Valley II	98	745,908	8,197	19.21	496	5.09
24	Downtown Salt Lake	153	1,289,858	9,174	27.55	912	6.02
25	South Salt Lake	75	585,617	8,689	26.81	428	5.79
26	Millcreek	141	1,306,882	9,681	24.00	860	6.17
27	Holladay	101	964,065	9,959	21.49	641	6.41
28	Cottonwood	57	536,097	9,607	12.26	322	5.68
29	Kearns	117	1,060,087	9,568	17.77	642	5.54
30	Taylorsville	52	427,378	8,904	13.53	299	5.81
31	Murray	77	539,923	7,758	18.55	526	6.89
32	Midvale	53	463,920	9,241	17.85	290	5.53
33	West Jordan No.	75	649,852	8,878	15.67	385	5.19
34	W. Jordan, Copperton	39	274,801	7,270	10.63	208	5.33
35	South Jordan	26	238,627	9,280	9.16	139	5.42

TABLE 13 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY
BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Bacterial pneumonia

Area of Residence		HOSPITAL CHARGES (DOLLARS)				DAYS OF STAY	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	81	736,197	9,366	14.78	453	5.63
37	Sandy, NE	28	262,862	9,524	9.49	160	5.66
38	Sandy, SE	26	272,053	10,545	8.64	150	5.87
39	Riverton/Draper	43	323,448	7,942	9.91	222	5.24
40	Tooele Co.	62	568,825	9,609	19.67	327	5.41
41	Lehi/Cedar Valley	32	157,653	5,021	11.67	133	4.14
42	American Fork/Alpine	79	561,890	7,185	17.96	389	4.96
43	Pleasant Grove/Lindon	59	435,363	7,480	18.40	316	5.44
44	North Orem	82	804,150	9,903	25.06	484	5.95
45	West Orem	36	259,475	7,226	10.35	197	5.49
46	East Orem	8	67,041	8,380	2.52	45	5.63
47	Provo/BYU	57	504,958	8,890	11.19	365	6.45
48	Provo South	88	863,902	9,907	19.02	578	6.63
49	Springville/Spanish Fork	154	1,469,019	9,601	35.63	894	5.80
50	Utah Co. South	91	800,937	8,919	43.49	485	5.33
51	Summit Co.	21	188,256	8,965	8.68	115	5.48
52	Wasatch Co.	28	166,801	6,000	14.49	126	4.47
53	Tri-county LHD	171	984,734	5,868	26.07	762	4.45
54	Juab/Millard/Sanpete Co.	125	912,036	7,331	24.65	702	5.65
55	Sevier/Piute/Wayne Co.	97	610,128	6,395	29.93	459	4.77
56	Carbon/Emery Co.	115	704,251	6,189	22.80	503	4.42
57	Grand/San Juan Co.	102	386,664	3,859	19.04	407	4.00
58	St. George	153	1,308,855	8,577	30.32	871	5.71
59	Other Washington Co.	97	728,850	7,514	30.91	516	5.32
60	Cedar City	42	307,753	7,363	14.13	196	4.65
61	Other Southwest Dist	135	683,617	5,226	37.37	739	5.48

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 14: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Congestive heart failure

Area of Residence		___HOSPITAL CHARGES (DOLLARS)___				___DAYS OF STAY___	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	2,221	14,628,341	7,005	7.64	12,129	5.50
1	Brigham City	17	103,470	6,309	5.68	65	4.00
2	Other Box Elder Co.	23	109,260	4,922	5.44	84	3.73
3	Logan	36	195,333	5,518	3.50	151	4.25
4	Other Cache/Rich Co.	31	168,038	5,601	6.68	125	4.07
5	Ben Lomond	70	417,909	6,313	11.00	345	4.97
6	Morgan/East Weber Co.	19	130,278	6,785	4.28	91	4.83
7	Downtown Ogden	57	384,108	6,884	16.03	291	5.12
8	South Ogden	53	323,202	6,215	10.94	254	4.85
9	Roy/Hooper	32	225,783	7,145	6.61	164	5.11
10	Riverdale	37	251,424	6,759	11.04	170	4.63
11	Clearfield/Hill AFB	54	354,010	6,654	8.11	249	4.64
12	Layton	43	320,570	8,136	6.44	239	5.51
13	Syracuse/Kaysville	25	185,106	7,345	6.81	130	5.18
14	Farmington/Centerville	9	61,302	7,128	2.62	40	4.57
15	Woods Cross/No SL	11	71,725	7,032	4.31	46	4.36
16	Bountiful	43	297,387	7,081	6.97	205	4.80
17	Rose Park	49	350,993	8,087	14.08	255	5.29
18	Avenues	33	238,509	8,168	10.54	195	6.01
19	Foothill/U of U	29	292,007	10,580	13.27	365	12.67
20	Magna	24	148,811	7,295	7.75	143	6.08
21	Glendale	42	325,973	8,669	16.36	243	5.84
22	West Valley I	46	320,842	7,981	5.75	250	5.54
23	West Valley II	36	218,489	6,661	5.63	224	6.20
24	Downtown Salt Lake	93	624,858	7,565	13.35	776	8.42
25	South Salt Lake	48	301,061	8,181	13.78	283	6.05
26	Millcreek	104	701,776	7,280	12.89	550	5.36
27	Holladay	57	432,736	8,134	9.64	326	5.77
28	Cottonwood	33	268,212	8,708	6.13	180	5.45
29	Kearns	50	355,277	8,186	5.96	420	8.43
30	Taylorsville	29	192,736	7,709	6.10	160	5.46
31	Murray	47	304,663	7,541	10.47	261	5.56
32	Midvale	28	172,088	6,775	6.62	125	4.54
33	West Jordan No.	21	133,403	6,948	3.22	97	4.68
34	W. Jordan, Copperton	19	128,917	7,006	4.99	88	4.69
35	South Jordan	7	44,221	6,449	1.70	31	4.32

TABLE 14 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Congestive heart failure

Area of Residence		HOSPITAL CHARGES (DOLLARS)				DAYS OF STAY	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	40	277,797	7,508	5.58	183	4.60
37	Sandy, NE	8	66,687	7,939	2.41	40	4.76
38	Sandy, SE	13	73,219	6,205	2.33	50	4.00
39	Riverton/Draper	16	118,587	8,101	3.63	80	4.87
40	Tooele Co.	32	255,213	8,622	8.83	152	4.87
41	Lehi/Cedar Valley	17	94,479	5,558	6.99	79	4.65
42	American Fork/Alpine	34	198,750	5,951	6.35	154	4.54
43	Pleasant Grove/Lindon	24	153,180	6,660	6.47	121	5.18
44	North Orem	50	385,997	8,008	12.03	299	6.05
45	West Orem	15	105,835	7,205	4.22	91	6.13
46	East Orem	9	51,177	5,686	1.92	36	4.00
47	Provo/BYU	28	175,431	6,403	3.89	150	5.36
48	Provo South	55	448,783	8,436	9.88	360	6.60
49	Springville/Spanish Fork	57	449,028	7,990	10.89	339	5.97
50	Utah Co. South	28	226,682	8,458	12.31	149	5.41
51	Summit Co.	10	74,747	7,786	3.45	50	5.02
52	Wasatch Co.	9	55,823	6,203	4.85	45	5.04
53	Tri-county LHD	69	342,990	5,277	9.08	297	4.34
54	Juab/Millard/Sanpete Co.	39	253,272	6,920	6.85	246	6.27
55	Sevier/Piute/Wayne Co.	54	277,544	5,277	13.62	214	3.96
56	Carbon/Emery Co.	44	263,986	6,197	8.55	176	4.04
57	Grand/San Juan Co.	21	97,373	4,637	4.80	95	4.59
58	St. George	57	388,756	6,893	9.01	264	4.66
59	Other Washington Co.	43	232,958	5,520	9.88	193	4.47
60	Cedar City	11	56,295	5,519	2.58	48	4.35
61	Other Southwest Dist	73	269,733	3,853	14.74	523	7.19

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 15: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Diabetes

Area of Residence		___HOSPITAL CHARGES (DOLLARS) ___				___DAYS OF STAY___	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	1,655	11,311,683	7,139	5.91	7,887	4.81
1	Brigham City	13	87,757	7,077	4.81	65	5.26
2	Other Box Elder Co.	16	98,855	6,419	4.92	63	3.99
3	Logan	22	127,955	5,979	2.29	75	3.46
4	Other Cache/Rich Co.	24	161,782	6,685	6.43	95	3.90
5	Ben Lomond	44	384,430	9,110	10.12	251	5.71
6	Morgan/East Weber Co.	14	55,758	4,100	1.83	53	3.76
7	Downtown Ogden	35	208,480	6,242	8.70	160	4.57
8	South Ogden	30	192,725	6,424	6.53	135	4.45
9	Roy/Hooper	34	302,818	9,121	8.86	166	5.00
10	Riverdale	23	161,163	7,007	7.08	107	4.69
11	Clearfield/Hill AFB	38	268,449	7,295	6.15	171	4.49
12	Layton	45	287,631	6,567	5.78	239	5.35
13	Syracuse/Kaysville	17	115,092	6,851	4.23	75	4.39
14	Farmington/Centerville	15	96,554	6,897	4.12	75	5.24
15	Woods Cross/No SL	7	43,301	6,561	2.60	26	3.97
16	Bountiful	32	260,029	8,498	6.09	144	4.54
17	Rose Park	38	258,926	7,398	10.39	166	4.46
18	Avenues	17	161,769	10,370	7.15	98	5.64
19	Foothill/U of U	15	87,181	5,971	3.96	80	5.42
20	Magna	19	136,166	8,105	7.09	87	4.76
21	Glendale	32	216,279	8,010	10.85	152	4.84
22	West Valley I	58	392,053	7,128	7.03	274	4.77
23	West Valley II	43	266,149	6,687	6.85	244	5.75
24	Downtown Salt Lake	56	445,927	8,883	9.53	409	7.33
25	South Salt Lake	45	234,829	6,021	10.75	183	4.14
26	Millcreek	63	457,240	7,595	8.40	277	4.41
27	Holladay	43	333,809	8,222	7.44	256	5.97
28	Cottonwood	32	269,466	8,637	6.16	163	5.04
29	Kearns	57	373,522	6,694	6.26	240	4.24
30	Taylorsville	39	250,539	6,593	7.93	165	4.30
31	Murray	35	317,507	10,048	10.91	178	5.13
32	Midvale	29	198,114	7,338	7.62	145	5.07
33	West Jordan No.	23	149,760	6,686	3.61	100	4.34
34	W. Jordan, Copperton	15	131,882	9,420	5.10	73	5.01
35	South Jordan	7	35,003	4,712	1.34	26	3.54

TABLE 15 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY
BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Diabetes

Area of Residence		HOSPITAL CHARGES (DOLLARS)				DAYS OF STAY	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	34	233,509	7,390	4.69	150	4.49
37	Sandy, NE	18	144,215	8,012	5.21	74	4.12
38	Sandy, SE	20	129,281	6,664	4.11	69	3.41
39	Riverton/Draper	16	115,607	7,318	3.54	72	4.46
40	Tooele Co.	31	284,515	9,484	9.84	139	4.60
41	Lehi/Cedar Valley	11	51,505	4,769	3.81	45	4.21
42	American Fork/Alpine	26	177,441	6,986	5.67	108	4.13
43	Pleasant Grove/Lindon	18	93,657	5,321	3.96	68	3.89
44	North Orem	28	154,577	5,855	4.82	117	4.23
45	West Orem	16	103,704	6,483	4.14	63	3.97
46	East Orem	5	28,528	5,706	1.07	21	4.20
47	Provo/BYU	20	120,163	6,194	2.66	90	4.56
48	Provo South	21	171,233	8,232	3.77	129	6.15
49	Springville/Spanish Fork	36	216,101	6,139	5.24	151	4.19
50	Utah Co. South	8	49,739	5,921	2.70	31	3.64
51	Summit Co.	10	52,455	5,044	2.42	35	3.41
52	Wasatch Co.	9	67,048	7,619	5.82	48	5.36
53	Tri-county LHD	51	280,430	5,654	7.42	213	4.22
54	Juab/Millard/Sanpete Co.	24	168,692	7,088	4.56	132	5.49
55	Sevier/Piute/Wayne Co.	22	90,938	4,210	4.46	76	3.47
56	Carbon/Emery Co.	33	234,943	7,296	7.61	125	3.82
57	Grand/San Juan Co.	13	49,568	3,934	2.44	205	16.02
58	St. George	35	248,642	7,145	5.76	177	5.06
59	Other Washington Co.	23	158,075	6,933	6.70	109	4.82
60	Cedar City	11	110,905	10,082	5.09	55	4.86
61	Other Southwest Dist	26	109,803	4,323	6.00	115	4.41

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 16: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Asthma

Area of Residence		___HOSPITAL CHARGES (DOLLARS) ___			___DAYS OF STAY___		
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	1,464	6,081,457	4,260	3.17	4,569	3.16
1	Brigham City	12	44,358	3,577	2.43	31	2.51
2	Other Box Elder Co.	14	39,190	2,760	1.95	35	2.44
3	Logan	33	105,648	3,163	1.89	90	2.68
4	Other Cache/Rich Co.	26	85,114	3,299	3.39	76	2.95
5	Ben Lomond	31	127,747	4,121	3.36	86	2.77
6	Morgan/East Weber Co.	12	42,733	3,561	1.40	33	2.73
7	Downtown Ogden	26	118,040	4,647	4.93	88	3.40
8	South Ogden	22	75,248	3,618	2.55	64	2.94
9	Roy/Hooper	20	91,782	4,683	2.69	58	2.97
10	Riverdale	14	58,534	4,304	2.57	39	2.92
11	Clearfield/Hill AFB	24	105,779	4,639	2.42	67	2.85
12	Layton	36	154,046	4,327	3.09	106	2.97
13	Syracuse/Kaysville	17	91,435	5,443	3.36	55	3.24
14	Farmington/Centerville	14	53,102	3,848	2.27	36	2.59
15	Woods Cross/No SL	11	44,704	4,139	2.68	29	2.69
16	Bountiful	25	109,613	4,492	2.57	74	3.09
17	Rose Park	35	131,915	4,148	5.29	100	2.99
18	Avenues	17	66,020	4,075	2.92	46	2.69
19	Foothill/U of U	11	52,657	5,162	2.39	29	2.79
20	Magna	25	89,340	3,692	4.65	71	2.85
21	Glendale	43	183,867	4,620	9.23	135	3.14
22	West Valley I	56	215,998	3,956	3.87	158	2.82
23	West Valley II	48	218,270	4,745	5.62	156	3.26
24	Downtown Salt Lake	47	209,749	4,767	4.48	157	3.41
25	South Salt Lake	32	148,009	4,934	6.78	109	3.44
26	Millcreek	44	229,628	5,467	4.22	155	3.56
27	Holladay	27	151,140	5,682	3.37	108	3.99
28	Cottonwood	26	119,714	4,713	2.74	82	3.17
29	Kearns	69	274,221	4,117	4.60	194	2.89
30	Taylorsville	30	131,127	4,751	4.15	96	3.27
31	Murray	27	112,822	4,306	3.88	89	3.37
32	Midvale	22	105,556	4,798	4.06	72	3.23
33	West Jordan No.	41	170,776	4,186	4.12	115	2.82
34	W. Jordan, Copperton	20	66,408	3,388	2.57	49	2.46
35	South Jordan	9	37,327	4,505	1.43	22	2.60

TABLE 16 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY
BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Asthma

Area of Residence		HOSPITAL CHARGES (DOLLARS)				DAYS OF STAY	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	35	139,882	4,090	2.81	93	2.73
37	Sandy, NE	11	54,720	4,800	1.98	37	3.30
38	Sandy, SE	10	33,033	3,303	1.05	24	2.43
39	Riverton/Draper	17	73,608	4,378	2.26	50	2.98
40	Tooele Co.	20	102,666	5,292	3.55	67	3.44
41	Lehi/Cedar Valley	8	25,640	3,287	1.90	22	2.85
42	American Fork/Alpine	19	67,159	3,572	2.15	62	3.38
43	Pleasant Grove/Lindon	12	43,219	3,543	1.83	39	3.13
44	North Orem	20	67,768	3,355	2.11	61	3.00
45	West Orem	10	32,964	3,482	1.31	28	2.95
46	East Orem	1	8,101	8,101	0.30	7	7.00
47	Provo/BYU	17	69,342	4,127	1.54	60	3.51
48	Provo South	27	147,417	5,542	3.25	115	4.37
49	Springville/Spanish Fork	34	163,064	4,796	3.96	123	3.59
50	Utah Co. South	15	66,072	4,464	3.59	44	3.03
51	Summit Co.	6	22,700	3,783	1.05	16	2.76
52	Wasatch Co.	5	14,992	3,259	1.30	12	2.57
53	Tri-county LHD	54	174,462	3,304	4.62	153	2.85
54	Juab/Millard/Sanpete Co.	21	84,239	4,089	2.28	70	3.41
55	Sevier/Piute/Wayne Co.	38	156,887	4,107	7.70	128	3.40
56	Carbon/Emery Co.	31	108,689	3,529	3.52	84	2.75
57	Grand/San Juan Co.	16	40,938	2,693	2.02	113	7.27
58	St. George	25	145,475	5,773	3.37	95	3.79
59	Other Washington Co.	12	58,856	4,746	2.50	40	3.36
60	Cedar City	7	28,613	3,867	1.31	20	2.73
61	Other Southwest Dist	16	51,419	3,296	2.81	67	4.31

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 17: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Dehydration

Area of Residence		___HOSPITAL CHARGES (DOLLARS) ___				___DAYS OF STAY___	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	1,393	4,694,653	3,425	2.45	4,280	3.10
1	Brigham City	20	52,118	2,606	2.86	46	2.39
2	Other Box Elder Co.	16	39,923	2,527	1.99	39	2.47
3	Logan	48	123,272	2,601	2.21	121	2.54
4	Other Cache/Rich Co.	23	64,539	2,856	2.57	54	2.43
5	Ben Lomond	44	141,822	3,283	3.73	134	3.09
6	Morgan/East Weber Co.	16	47,449	3,042	1.56	45	2.84
7	Downtown Ogden	42	140,847	3,370	5.88	138	3.33
8	South Ogden	33	123,947	3,756	4.20	120	3.61
9	Roy/Hooper	32	99,049	3,115	2.90	92	2.89
10	Riverdale	30	99,540	3,340	4.37	95	3.16
11	Clearfield/Hill AFB	39	140,842	3,630	3.23	111	2.88
12	Layton	38	120,706	3,193	2.43	111	2.91
13	Syracuse/Kaysville	20	61,460	3,136	2.26	46	2.35
14	Farmington/Centerville	9	47,366	5,639	2.02	33	3.86
15	Woods Cross/No SL	6	23,389	4,331	1.40	19	3.36
16	Bountiful	19	62,567	3,328	1.47	48	2.52
17	Rose Park	17	62,133	3,932	2.49	54	3.19
18	Avenues	12	69,443	5,692	3.07	51	4.27
19	Foothill/U of U	15	240,086	16,222	10.91	50	3.32
20	Magna	12	50,421	4,502	2.63	39	3.28
21	Glendale	17	81,824	5,051	4.11	60	3.56
22	West Valley I	27	83,361	3,231	1.49	79	3.00
23	West Valley II	24	88,376	3,713	2.28	79	3.23
24	Downtown Salt Lake	35	166,261	4,978	3.55	137	3.90
25	South Salt Lake	16	61,532	3,944	2.82	56	3.50
26	Millcreek	41	185,154	4,606	3.40	143	3.56
27	Holladay	26	106,027	4,207	2.36	96	3.63
28	Cottonwood	15	53,692	3,729	1.23	42	2.93
29	Kearns	32	92,137	2,991	1.54	81	2.57
30	Taylorsville	18	61,816	3,680	1.96	56	3.31
31	Murray	21	73,369	3,743	2.52	65	3.09
32	Midvale	19	60,898	3,205	2.34	53	2.81
33	West Jordan No.	22	47,664	2,270	1.15	46	2.09
34	W. Jordan, Copperton	12	31,447	2,578	1.22	28	2.31
35	South Jordan	5	18,502	3,598	0.71	11	2.35

TABLE 17 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY
BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Dehydration

Area of Residence		___HOSPITAL CHARGES (DOLLARS) ___				___DAYS OF STAY___	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	23	79,733	3,497	1.60	65	2.81
37	Sandy, NE	9	26,483	2,943	0.96	23	2.60
38	Sandy, SE	11	43,528	3,886	1.38	35	3.18
39	Riverton/Draper	13	39,598	3,105	1.21	36	2.84
40	Tooele Co.	12	42,402	3,719	1.47	37	3.00
41	Lehi/Cedar Valley	8	15,896	1,892	1.18	15	1.83
42	American Fork/Alpine	17	40,679	2,365	1.30	41	2.38
43	Pleasant Grove/Lindon	16	39,026	2,409	1.65	41	2.54
44	North Orem	32	95,308	2,978	2.97	94	2.97
45	West Orem	14	44,139	3,144	1.76	43	3.09
46	East Orem	4	9,391	2,348	0.35	10	2.50
47	Provo/BYU	25	92,672	3,707	2.05	92	3.75
48	Provo South	43	127,294	2,988	2.80	136	3.20
49	Springville/Spanish Fork	36	123,181	3,403	2.99	113	3.14
50	Utah Co. South	18	68,075	3,868	3.70	54	3.08
51	Summit Co.	7	19,873	3,011	0.92	17	2.53
52	Wasatch Co.	4	12,738	2,895	1.11	11	2.52
53	Tri-county LHD	72	157,199	2,202	4.16	184	2.57
54	Juab/Millard/Sanpete Co.	16	57,389	3,679	1.55	53	3.33
55	Sevier/Piute/Wayne Co.	19	60,370	3,144	2.96	57	2.97
56	Carbon/Emery Co.	22	68,713	3,241	2.22	65	3.03
57	Grand/San Juan Co.	20	33,617	1,715	1.66	61	3.09
58	St. George	46	147,246	3,187	3.41	158	3.42
59	Other Washington Co.	27	86,099	3,213	3.65	88	3.32
60	Cedar City	7	21,406	2,893	0.98	21	2.86
61	Other Southwest Dist	39	80,647	2,180	4.41	213	5.56

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 18: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Pyelonephritis/Urinary infection

Area of Residence		___HOSPITAL CHARGES (DOLLARS) ___			___DAYS OF STAY___		
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	1,321	5,533,518	4,349	2.89	5,030	3.82
1	Brigham City	9	37,748	4,494	2.07	27	3.14
2	Other Box Elder Co.	13	42,897	3,351	2.13	45	3.37
3	Logan	34	123,711	3,660	2.22	109	3.24
4	Other Cache/Rich Co.	26	84,840	3,340	3.37	79	3.12
5	Ben Lomond	29	118,273	4,194	3.11	130	4.55
6	Morgan/East Weber Co.	13	72,862	5,876	2.39	53	4.17
7	Downtown Ogden	26	102,058	4,115	4.26	109	4.23
8	South Ogden	19	83,262	4,525	2.82	70	3.78
9	Roy/Hooper	20	77,252	3,941	2.26	94	4.60
10	Riverdale	15	54,312	3,621	2.39	53	3.43
11	Clearfield/Hill AFB	19	77,492	4,122	1.78	70	3.63
12	Layton	26	111,747	4,399	2.25	99	3.91
13	Syracuse/Kaysville	13	46,698	3,828	1.72	44	3.46
14	Farmington/Centerville	11	44,497	4,198	1.90	36	3.31
15	Woods Cross/No SL	9	40,250	4,792	2.42	33	3.86
16	Bountiful	23	112,799	5,321	2.64	100	4.31
17	Rose Park	27	138,037	5,566	5.54	125	4.61
18	Avenues	17	88,804	5,482	3.93	68	4.04
19	Foothill/U of U	18	100,903	5,799	4.59	91	4.97
20	Magna	14	71,527	5,037	3.72	51	3.54
21	Glendale	32	132,483	4,698	6.65	125	3.97
22	West Valley I	31	124,605	4,181	2.23	100	3.30
23	West Valley II	32	147,802	4,707	3.81	116	3.66
24	Downtown Salt Lake	53	283,014	5,660	6.05	240	4.52
25	South Salt Lake	26	119,459	4,936	5.47	104	4.02
26	Millcreek	49	241,444	5,181	4.43	206	4.20
27	Holladay	35	152,415	4,704	3.40	151	4.29
28	Cottonwood	21	91,826	4,458	2.10	82	3.87
29	Kearns	33	123,355	3,855	2.07	102	3.12
30	Taylorsville	21	97,738	5,144	3.09	94	4.42
31	Murray	29	143,323	5,470	4.92	128	4.38
32	Midvale	23	94,057	4,315	3.62	83	3.59
33	West Jordan No.	24	114,277	4,762	2.76	98	4.07
34	W. Jordan, Copperton	15	59,703	4,264	2.31	57	3.77
35	South Jordan	5	14,630	3,200	0.56	11	2.38

TABLE 18 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Pyelonephritis/Urinary infection

Area of Residence		HOSPITAL CHARGES (DOLLARS)				DAYS OF STAY	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	24	95,266	4,142	1.91	84	3.48
37	Sandy, NE	11	47,936	4,700	1.73	43	4.00
38	Sandy, SE	11	44,066	3,935	1.40	36	3.18
39	Riverton/Draper	14	56,758	4,257	1.74	54	3.86
40	Tooele Co.	19	96,429	5,417	3.34	76	3.97
41	Lehi/Cedar Valley	12	41,501	3,517	3.07	40	3.31
42	American Fork/Alpine	17	57,081	3,281	1.82	54	3.15
43	Pleasant Grove/Lindon	17	61,664	3,715	2.61	60	3.60
44	North Orem	17	66,527	4,008	2.07	67	3.90
45	West Orem	8	33,672	4,072	1.34	34	4.03
46	East Orem	4	18,326	4,582	0.69	15	3.75
47	Provo/BYU	12	54,516	4,700	1.21	47	3.95
48	Provo South	19	105,671	5,504	2.33	88	4.53
49	Springville/Spanish Fork	37	157,270	4,344	3.81	134	3.67
50	Utah Co. South	18	90,134	5,064	4.89	62	3.59
51	Summit Co.	8	31,409	3,739	1.45	25	2.95
52	Wasatch Co.	12	40,059	3,284	3.48	43	3.49
53	Tri-county LHD	55	162,686	3,070	4.31	169	3.08
54	Juab/Millard/Sanpete Co.	28	99,462	3,502	2.69	96	3.39
55	Sevier/Piute/Wayne Co.	24	108,791	4,459	5.34	85	3.48
56	Carbon/Emery Co.	22	77,478	3,761	2.51	69	3.16
57	Grand/San Juan Co.	19	40,847	2,196	2.01	55	2.98
58	St. George	30	137,457	4,552	3.18	128	4.25
59	Other Washington Co.	20	73,612	3,681	3.12	71	3.55
60	Cedar City	13	47,571	3,604	2.18	45	3.34
61	Other Southwest Dist	29	86,492	3,067	4.73	133	4.63

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 19: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Perforated or bleeding ulcer

Area of Residence		___HOSPITAL CHARGES (DOLLARS)___				___DAYS OF STAY___	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	985	8,784,060	9,343	4.59	4,900	5.00
1	Brigham City	11	68,697	6,605	3.77	33	3.13
2	Other Box Elder Co.	8	81,339	10,703	4.05	32	4.08
3	Logan	20	131,413	6,571	2.36	78	3.91
4	Other Cache/Rich Co.	14	106,559	7,835	4.24	63	4.50
5	Ben Lomond	26	182,451	7,298	4.80	113	4.35
6	Morgan/East Weber Co.	10	112,316	11,232	3.69	55	5.50
7	Downtown Ogden	19	144,090	7,664	6.01	89	4.74
8	South Ogden	22	225,581	10,444	7.64	119	5.35
9	Roy/Hooper	16	126,428	8,104	3.70	71	4.58
10	Riverdale	13	111,430	8,572	4.89	66	5.19
11	Clearfield/Hill AFB	17	191,499	11,821	4.39	92	5.45
12	Layton	15	124,442	8,523	2.50	63	4.29
13	Syracuse/Kaysville	16	129,602	8,416	4.77	77	5.03
14	Farmington/Centerville	9	79,963	9,519	3.41	48	5.58
15	Woods Cross/No SL	4	25,725	6,770	1.54	19	4.48
16	Bountiful	22	183,211	8,482	4.29	97	4.40
17	Rose Park	17	179,465	11,078	7.20	92	5.35
18	Avenues	16	161,391	11,054	7.13	79	5.09
19	Foothill/U of U	14	177,159	13,026	8.05	84	6.10
20	Magna	11	91,057	9,485	4.74	49	4.54
21	Glendale	22	183,910	9,480	9.23	143	6.55
22	West Valley I	21	177,193	9,527	3.18	101	4.86
23	West Valley II	24	381,135	17,483	9.81	133	5.69
24	Downtown Salt Lake	42	497,826	13,455	10.63	286	7.00
25	South Salt Lake	23	246,839	12,342	11.30	134	5.86
26	Millcreek	48	407,994	8,908	7.49	219	4.59
27	Holladay	40	398,809	10,663	8.89	219	5.52
28	Cottonwood	24	207,941	8,737	4.76	111	4.61
29	Kearns	24	237,955	10,719	3.99	139	5.78
30	Taylorsville	17	155,849	9,388	4.93	77	4.50
31	Murray	29	237,547	8,998	8.16	139	4.94
32	Midvale	15	155,327	11,256	5.98	75	5.14
33	West Jordan No.	12	92,342	8,245	2.23	50	4.34
34	W. Jordan, Copperton	6	31,286	6,257	1.21	23	3.90
35	South Jordan	3	25,272	8,041	0.97	13	4.18

TABLE 19 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Perforated or bleeding ulcer

Area of Residence		HOSPITAL CHARGES (DOLLARS)				DAYS OF STAY	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	21	146,493	7,252	2.94	83	3.98
37	Sandy, NE	8	75,034	9,150	2.71	43	5.33
38	Sandy, SE	9	48,875	5,960	1.55	41	4.41
39	Riverton/Draper	8	60,445	8,341	1.85	35	4.62
40	Tooele Co.	15	147,725	9,981	5.11	83	5.49
41	Lehi/Cedar Valley	5	21,280	4,626	1.58	18	3.71
42	American Fork/Alpine	13	84,041	6,367	2.69	53	4.05
43	Pleasant Grove/Lindon	9	57,353	6,373	2.42	46	5.02
44	North Orem	19	102,029	5,427	3.18	63	3.29
45	West Orem	7	67,577	9,410	2.70	38	5.16
46	East Orem	1	3,542	3,542	0.13	2	2.00
47	Provo/BYU	17	149,294	8,680	3.31	78	4.51
48	Provo South	13	89,697	7,119	1.97	58	4.62
49	Springville/Spanish Fork	24	286,022	12,436	6.94	144	5.96
50	Utah Co. South	11	81,954	8,035	4.45	52	4.61
51	Summit Co.	7	46,679	7,529	2.15	28	4.18
52	Wasatch Co.	6	71,903	12,397	6.25	35	6.00
53	Tri-county LHD	19	180,799	10,044	4.79	107	5.67
54	Juab/Millard/Sanpete Co.	14	93,637	7,203	2.53	61	4.49
55	Sevier/Piute/Wayne Co.	18	116,111	6,911	5.70	88	4.94
56	Carbon/Emery Co.	20	193,186	9,757	6.25	104	5.24
57	Grand/San Juan Co.	3	27,833	10,705	1.37	21	8.58
58	St. George	26	202,391	7,784	4.69	126	4.86
59	Other Washington Co.	17	128,604	7,747	5.45	76	4.59
60	Cedar City	9	76,666	8,333	3.52	39	4.28
61	Other Southwest Dist	13	84,662	7,055	4.63	60	4.76

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 20: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Cellulitis

Area of Residence		___HOSPITAL CHARGES (DOLLARS) ___				___DAYS OF STAY___	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	871	3,331,799	4,082	1.74	3,576	4.13
1	Brigham City	8	30,411	3,801	1.67	27	3.32
2	Other Box Elder Co.	10	27,766	2,892	1.38	33	3.19
3	Logan	19	60,631	3,225	1.09	65	3.42
4	Other Cache/Rich Co.	15	56,805	3,787	2.26	60	3.88
5	Ben Lomond	18	84,664	4,756	2.23	84	4.66
6	Morgan/East Weber Co.	8	24,286	3,195	0.80	29	3.69
7	Downtown Ogden	16	72,560	4,837	3.03	72	4.53
8	South Ogden	12	44,326	3,756	1.50	47	3.95
9	Roy/Hooper	11	51,834	4,628	1.52	50	4.45
10	Riverdale	10	37,463	3,673	1.65	41	3.98
11	Clearfield/Hill AFB	15	72,692	5,192	1.67	72	4.96
12	Layton	16	63,586	4,024	1.28	68	4.19
13	Syracuse/Kaysville	8	43,936	5,633	1.62	37	4.63
14	Farmington/Centerville	7	27,370	3,801	1.17	24	3.24
15	Woods Cross/No SL	8	35,047	4,611	2.10	29	3.84
16	Bountiful	18	82,145	4,564	1.92	79	4.29
17	Rose Park	21	69,089	3,971	2.77	80	3.94
18	Avenues	14	54,305	4,243	2.40	53	3.84
19	Foothill/U of U	11	50,722	4,877	2.31	56	4.98
20	Magna	15	48,219	3,709	2.51	51	3.56
21	Glendale	30	111,425	4,887	5.59	149	4.97
22	West Valley I	29	120,899	4,723	2.17	121	4.22
23	West Valley II	18	69,226	4,221	1.78	70	3.92
24	Downtown Salt Lake	39	160,293	4,660	3.42	157	4.09
25	South Salt Lake	21	73,958	4,064	3.39	77	3.81
26	Millcreek	32	129,364	4,492	2.38	151	4.73
27	Holladay	21	83,354	4,253	1.86	101	4.86
28	Cottonwood	13	49,295	4,178	1.13	57	4.29
29	Kearns	21	88,267	4,695	1.48	83	4.01
30	Taylorsville	11	38,973	3,977	1.23	40	3.72
31	Murray	18	71,669	4,536	2.46	77	4.30
32	Midvale	10	38,055	4,228	1.46	46	4.53
33	West Jordan No.	15	50,186	3,585	1.21	55	3.59
34	W. Jordan, Copperton	7	25,266	3,948	0.98	21	3.03
35	South Jordan	4	16,716	4,179	0.64	16	3.73

TABLE 20 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY
BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Cellulitis

Area of Residence		HOSPITAL CHARGES (DOLLARS)				DAYS OF STAY	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	18	74,767	4,450	1.50	68	3.86
37	Sandy, NE	7	21,801	3,516	0.79	23	3.52
38	Sandy, SE	9	29,992	3,487	0.95	29	3.49
39	Riverton/Draper	10	39,741	3,917	1.22	38	3.65
40	Tooele Co.	12	42,462	3,932	1.47	47	3.81
41	Lehi/Cedar Valley	6	21,035	3,393	1.56	22	3.52
42	American Fork/Alpine	8	24,028	3,247	0.77	26	3.47
43	Pleasant Grove/Lindon	6	17,774	2,867	0.75	20	3.23
44	North Orem	8	31,350	3,919	0.98	37	4.38
45	West Orem	5	21,125	4,220	0.84	22	4.28
46	East Orem	1	8,331	8,331	0.31	7	7.00
47	Provo/BYU	13	46,486	3,689	1.03	52	4.10
48	Provo South	13	47,275	3,752	1.04	51	3.98
49	Springville/Spanish Fork	15	74,244	5,228	1.80	74	5.03
50	Utah Co. South	9	36,122	4,300	1.96	34	4.00
51	Summit Co.	6	18,939	3,642	0.87	22	4.04
52	Wasatch Co.	4	15,473	4,298	1.34	17	4.15
53	Tri-county LHD	45	148,127	3,321	3.92	179	4.01
54	Juab/Millard/Sanpete Co.	18	78,215	4,444	2.11	87	4.74
55	Sevier/Piute/Wayne Co.	12	41,095	3,605	2.02	45	3.90
56	Carbon/Emery Co.	15	59,024	4,043	1.91	60	4.01
57	Grand/San Juan Co.	12	30,932	2,621	1.52	45	3.78
58	St. George	25	90,140	3,577	2.09	108	4.28
59	Other Washington Co.	14	54,064	4,096	2.29	61	4.27
60	Cedar City	3	11,791	3,930	0.54	11	3.67
61	Other Southwest Dist	22	61,535	2,875	3.36	93	4.21

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 21: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Chronic obstructive pulmonary disease

Area of Residence		___HOSPITAL CHARGES (DOLLARS) ___				___DAYS OF STAY___	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	828	5,435,532	7,535	2.84	4,715	5.74
1	Brigham City	5	31,189	6,498	1.71	23	4.42
2	Other Box Elder Co.	6	21,886	3,774	1.09	17	2.81
3	Logan	17	74,556	4,719	1.34	88	5.18
4	Other Cache/Rich Co.	12	53,793	4,483	2.14	42	3.43
5	Ben Lomond	25	111,238	5,150	2.93	132	5.32
6	Morgan/East Weber Co.	7	60,481	10,800	1.99	38	5.70
7	Downtown Ogden	27	136,619	5,645	5.70	119	4.47
8	South Ogden	20	130,885	7,113	4.43	89	4.52
9	Roy/Hooper	12	106,786	9,206	3.12	53	4.55
10	Riverdale	7	52,853	7,550	2.32	34	4.78
11	Clearfield/Hill AFB	19	116,031	6,519	2.66	84	4.52
12	Layton	27	223,151	8,855	4.48	169	6.30
13	Syracuse/Kaysville	6	32,875	6,322	1.21	32	5.13
14	Farmington/Centerville	3	24,863	9,563	1.06	14	5.54
15	Woods Cross/No SL	4	26,320	8,225	1.58	21	5.42
16	Bountiful	8	58,020	8,289	1.36	78	9.56
17	Rose Park	24	172,101	9,778	6.90	168	6.99
18	Avenues	11	79,353	10,441	3.51	64	6.04
19	Foothill/U of U	6	38,720	6,676	1.76	27	4.69
20	Magna	15	99,348	8,012	5.17	94	6.53
21	Glendale	30	196,050	8,450	9.84	194	6.41
22	West Valley I	19	107,460	7,070	1.93	101	5.29
23	West Valley II	26	147,020	7,207	3.79	156	6.03
24	Downtown Salt Lake	33	168,358	6,789	3.60	274	8.42
25	South Salt Lake	23	142,389	8,090	6.52	126	5.59
26	Millcreek	22	167,752	9,217	3.08	116	5.29
27	Holladay	21	162,580	8,933	3.62	116	5.68
28	Cottonwood	12	111,554	9,960	2.55	64	5.65
29	Kearns	29	184,683	7,387	3.10	161	5.59
30	Taylorsville	16	79,458	6,622	2.52	58	3.72
31	Murray	23	92,832	6,107	3.19	210	8.99
32	Midvale	13	78,574	7,703	3.02	69	5.31
33	West Jordan No.	10	73,634	8,367	1.78	60	5.90
34	W. Jordan, Copperton	4	20,376	6,792	0.79	19	4.89
35	South Jordan	2	15,118	8,819	0.58	10	6.00

TABLE 21 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Chronic obstructive pulmonary disease

Area of Residence		HOSPITAL CHARGES (DOLLARS)				DAYS OF STAY	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	13	111,749	9,470	2.24	72	5.55
37	Sandy, NE	4	27,032	7,509	0.98	18	5.06
38	Sandy, SE	3	18,959	8,618	0.60	18	6.77
39	Riverton/Draper	6	43,389	9,072	1.33	32	5.02
40	Tooele Co.	19	104,400	6,444	3.61	86	4.57
41	Lehi/Cedar Valley	4	39,644	11,012	2.93	27	7.56
42	American Fork/Alpine	7	34,835	5,278	1.11	30	4.31
43	Pleasant Grove/Lindon	11	67,884	6,061	2.87	55	5.00
44	North Orem	12	100,347	8,092	3.13	79	6.49
45	West Orem	4	25,115	6,411	1.00	22	5.64
46	East Orem	3	40,385	13,462	1.52	31	10.33
47	Provo/BYU	8	56,885	7,111	1.26	48	6.03
48	Provo South	26	222,370	8,553	4.90	196	7.49
49	Springville/Spanish Fork	17	136,605	8,432	3.31	129	7.50
50	Utah Co. South	10	65,033	6,636	3.53	53	5.24
51	Summit Co.	2	22,611	18,843	1.04	9	5.11
52	Wasatch Co.	7	38,070	5,599	3.31	41	5.59
53	Tri-county LHD	29	193,945	7,346	5.13	137	4.79
54	Juab/Millard/Sanpete Co.	12	80,256	7,166	2.17	60	4.81
55	Sevier/Piute/Wayne Co.	8	45,770	6,357	2.25	38	4.68
56	Carbon/Emery Co.	13	78,663	6,666	2.55	55	4.26
57	Grand/San Juan Co.	11	53,015	4,909	2.61	42	3.65
58	St. George	21	230,179	11,283	5.33	123	5.90
59	Other Washington Co.	13	111,462	9,289	4.73	70	5.48
60	Cedar City	3	12,724	5,784	0.58	51	15.88
61	Other Southwest Dist	14	74,611	5,329	4.08	69	4.90

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 22: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Angina

Area of Residence		___HOSPITAL CHARGES (DOLLARS)___			___DAYS OF STAY___		
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	792	2,560,834	3,698	1.34	2,024	2.60
1	Brigham City	10	30,458	2,986	1.67	16	1.55
2	Other Box Elder Co.	6	12,927	2,486	0.64	13	2.00
3	Logan	11	40,647	3,695	0.73	26	2.35
4	Other Cache/Rich Co.	7	18,954	3,268	0.75	18	2.70
5	Ben Lomond	14	48,140	3,540	1.27	35	2.43
6	Morgan/East Weber Co.	3	9,396	2,763	0.31	6	1.82
7	Downtown Ogden	11	34,866	3,558	1.46	29	2.69
8	South Ogden	12	41,784	3,602	1.41	29	2.43
9	Roy/Hooper	9	32,427	3,771	0.95	20	2.13
10	Riverdale	9	34,275	3,726	1.51	20	2.18
11	Clearfield/Hill AFB	15	54,823	4,283	1.26	35	2.40
12	Layton	18	67,741	4,182	1.36	47	2.57
13	Syracuse/Kaysville	11	45,176	4,518	1.66	28	2.51
14	Farmington/Centerville	5	17,326	3,767	0.74	10	2.00
15	Woods Cross/No SL	4	13,489	4,496	0.81	10	2.72
16	Bountiful	14	56,614	4,798	1.33	42	3.03
17	Rose Park	13	32,967	3,507	1.32	35	2.64
18	Avenues	10	21,403	3,344	0.95	22	2.31
19	Foothill/U of U	6	21,385	3,819	0.97	12	2.07
20	Magna	7	23,818	4,411	1.24	19	2.58
21	Glendale	14	32,034	4,329	1.61	48	3.61
22	West Valley I	15	53,483	4,114	0.96	36	2.36
23	West Valley II	17	55,014	4,912	1.42	45	2.67
24	Downtown Salt Lake	26	80,022	4,125	1.71	72	2.78
25	South Salt Lake	14	44,403	4,270	2.03	40	2.97
26	Millcreek	26	93,780	4,224	1.72	72	2.81
27	Holladay	22	62,913	3,701	1.40	87	4.06
28	Cottonwood	13	43,666	3,764	1.00	35	2.75
29	Kearns	18	53,726	3,784	0.90	73	3.99
30	Taylorsville	14	42,033	3,965	1.33	45	3.20
31	Murray	17	52,544	3,981	1.81	69	3.98
32	Midvale	12	38,842	3,596	1.49	26	2.24
33	West Jordan No.	15	45,080	3,522	1.09	30	2.08
34	W. Jordan, Copperton	8	22,402	3,394	0.87	14	1.89
35	South Jordan	5	12,609	3,395	0.48	9	2.00

TABLE 22 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY
BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Angina

Area of Residence		HOSPITAL CHARGES (DOLLARS)				DAYS OF STAY	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	22	72,487	3,624	1.46	53	2.47
37	Sandy, NE	4	10,643	3,326	0.38	6	1.88
38	Sandy, SE	7	21,745	3,398	0.69	11	1.68
39	Riverton/Draper	10	38,788	4,248	1.19	21	2.06
40	Tooele Co.	11	40,270	4,109	1.39	28	2.58
41	Lehi/Cedar Valley	13	35,517	2,864	2.63	21	1.75
42	American Fork/Alpine	22	59,628	2,686	1.91	31	1.44
43	Pleasant Grove/Lindon	16	45,629	3,002	1.93	25	1.67
44	North Orem	13	41,649	3,471	1.30	28	2.25
45	West Orem	4	13,625	3,913	0.54	9	2.41
46	East Orem	3	9,384	3,128	0.35	4	1.33
47	Provo/BYU	4	14,531	3,824	0.32	10	2.45
48	Provo South	9	25,357	3,622	0.56	19	2.16
49	Springville/Spanish Fork	16	61,401	4,040	1.49	39	2.46
50	Utah Co. South	15	65,234	4,660	3.54	33	2.20
51	Summit Co.	3	6,845	3,803	0.32	8	3.23
52	Wasatch Co.	4	11,086	3,261	0.96	10	2.68
53	Tri-county LHD	37	129,135	3,821	3.42	83	2.26
54	Juab/Millard/Sanpete Co.	15	31,574	2,506	0.85	30	2.04
55	Sevier/Piute/Wayne Co.	19	49,619	2,697	2.43	36	1.89
56	Carbon/Emery Co.	38	141,824	3,792	4.59	70	1.86
57	Grand/San Juan Co.	5	12,678	2,438	0.62	10	1.85
58	St. George	25	98,972	4,023	2.29	75	2.99
59	Other Washington Co.	13	44,108	3,557	1.87	41	3.14
60	Cedar City	9	30,735	3,270	1.41	18	1.91
61	Other Southwest Dist	18	42,334	2,646	2.31	126	6.92

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 23: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Appendicitis with rupture

Area of Residence		___HOSPITAL CHARGES (DOLLARS) ___				___DAYS OF STAY___	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	581	5,340,426	9,297	2.79	3,321	5.72
1	Brigham City	5	72,128	13,871	3.96	34	6.26
2	Other Box Elder Co.	8	54,413	6,976	2.71	36	4.67
3	Logan	12	92,738	7,995	1.66	68	5.84
4	Other Cache/Rich Co.	11	79,698	7,379	3.17	64	5.78
5	Ben Lomond	10	113,144	11,093	2.98	62	6.06
6	Morgan/East Weber Co.	8	62,988	7,499	2.07	41	4.90
7	Downtown Ogden	12	109,290	9,107	4.56	65	5.36
8	South Ogden	9	87,503	9,943	2.96	54	6.14
9	Roy/Hooper	11	119,478	11,272	3.50	69	6.55
10	Riverdale	6	50,224	8,659	2.21	30	5.21
11	Clearfield/Hill AFB	10	89,180	9,100	2.04	50	5.14
12	Layton	15	146,648	9,909	2.95	81	5.49
13	Syracuse/Kaysville	8	103,682	13,293	3.81	46	5.73
14	Farmington/Centerville	8	59,178	7,997	2.53	35	4.66
15	Woods Cross/No SL	5	52,746	9,768	3.17	31	5.67
16	Bountiful	16	151,779	9,606	3.56	80	4.98
17	Rose Park	7	77,125	11,018	3.09	48	6.89
18	Avenues	7	89,599	12,800	3.96	52	7.43
19	Foothill/U of U	5	48,957	9,415	2.23	29	5.65
20	Magna	5	66,381	12,766	3.46	41	7.56
21	Glendale	10	84,524	9,187	4.24	56	5.85
22	West Valley I	20	228,173	11,884	4.09	127	6.50
23	West Valley II	15	150,629	9,910	3.88	90	5.93
24	Downtown Salt Lake	12	104,267	9,654	2.23	68	5.83
25	South Salt Lake	10	113,605	11,360	5.20	71	6.79
26	Millcreek	16	145,080	9,421	2.66	98	6.04
27	Holladay	12	95,365	8,082	2.13	60	4.97
28	Cottonwood	12	83,949	7,237	1.92	56	4.83
29	Kearns	19	169,798	9,129	2.85	104	5.46
30	Taylorsville	10	73,454	7,984	2.33	50	5.21
31	Murray	10	72,896	7,593	2.50	58	5.56
32	Midvale	7	61,629	9,063	2.37	39	5.68
33	West Jordan No.	13	107,767	8,419	2.60	67	5.17
34	W. Jordan, Copperton	8	63,137	7,892	2.44	42	5.28
35	South Jordan	4	31,509	7,877	1.21	21	5.21

TABLE 23 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY
BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Appendicitis with rupture

Area of Residence		HOSPITAL CHARGES (DOLLARS)				DAYS OF STAY	
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	14	132,691	9,344	2.66	91	6.35
37	Sandy, NE	5	41,509	7,687	1.50	28	5.15
38	Sandy, SE	8	55,654	7,323	1.77	41	5.45
39	Riverton/Draper	9	78,029	9,125	2.39	52	6.00
40	Tooele Co.	9	85,061	10,126	2.94	52	6.02
41	Lehi/Cedar Valley	3	30,046	10,015	2.22	20	6.53
42	American Fork/Alpine	10	61,150	6,370	1.95	43	4.50
43	Pleasant Grove/Lindon	9	58,706	6,671	2.48	41	4.64
44	North Orem	14	99,732	7,227	3.11	76	5.52
45	West Orem	5	39,287	7,221	1.57	30	5.52
46	East Orem	1	3,728	3,728	0.14	2	2.00
47	Provo/BYU	10	76,639	7,369	1.70	57	5.44
48	Provo South	12	94,320	7,860	2.08	71	5.93
49	Springville/Spanish Fork	13	114,864	8,836	2.79	72	5.51
50	Utah Co. South	6	53,745	8,669	2.92	30	5.10
51	Summit Co.	7	47,091	6,540	2.17	31	4.25
52	Wasatch Co.	4	35,493	8,873	3.08	27	6.75
53	Tri-county LHD	14	146,103	10,743	3.87	84	6.21
54	Juab/Millard/Sanpete Co.	5	97,982	18,145	2.65	41	7.59
55	Sevier/Piute/Wayne Co.	10	107,306	10,520	5.26	58	5.67
56	Carbon/Emery Co.	14	194,252	13,490	6.29	82	5.72
57	Grand/San Juan Co.	3	22,636	8,084	1.11	18	6.43
58	St. George	14	109,032	7,678	2.53	84	5.94
59	Other Washington Co.	10	91,613	9,348	3.88	70	7.18
60	Cedar City	6	49,736	8,575	2.28	28	4.79
61	Other Southwest Dist	5	51,220	10,244	2.80	32	6.40

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

TABLE 24: NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Gastroenteritis

Area of Residence		___HOSPITAL CHARGES (DOLLARS) ___			___DAYS OF STAY___		
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
0	State Total	364	1,022,775	2,906	0.53	934	2.59
1	Brigham City	2	4,750	1,979	0.26	3	1.17
2	Other Box Elder Co.	5	11,178	2,329	0.56	10	2.08
3	Logan	5	10,383	2,077	0.19	10	2.08
4	Other Cache/Rich Co.	6	19,816	3,196	0.79	13	2.20
5	Ben Lomond	6	16,400	2,562	0.43	16	2.47
6	Morgan/East Weber Co.	2	3,735	2,075	0.12	3	1.70
7	Downtown Ogden	6	15,623	2,790	0.65	16	2.70
8	South Ogden	5	12,769	2,660	0.43	10	2.13
9	Roy/Hooper	5	12,812	3,050	0.37	13	2.91
10	Riverdale	4	10,048	2,392	0.44	16	3.73
11	Clearfield/Hill AFB	8	18,273	2,343	0.42	15	1.87
12	Layton	6	19,301	3,016	0.39	14	2.13
13	Syracuse/Kaysville	3	10,148	3,624	0.37	8	2.60
14	Farmington/Centerville	3	14,881	4,650	0.64	10	3.19
15	Woods Cross/No SL	3	8,514	3,274	0.51	5	1.93
16	Bountiful	7	28,295	4,161	0.66	18	2.65
17	Rose Park	6	20,925	3,875	0.84	13	2.37
18	Avenues	2	9,848	4,924	0.44	6	3.88
19	Foothill/U of U	3	10,017	3,130	0.46	7	2.19
20	Magna	3	7,352	2,828	0.38	6	1.94
21	Glendale	6	28,211	6,133	1.42	26	4.61
22	West Valley I	9	26,050	3,177	0.47	22	2.57
23	West Valley II	9	35,206	4,401	0.91	25	2.89
24	Downtown Salt Lake	6	26,520	5,100	0.57	20	3.52
25	South Salt Lake	4	12,093	3,779	0.55	15	3.48
26	Millcreek	8	22,134	2,991	0.41	18	2.42
27	Holladay	8	28,112	3,799	0.63	25	3.21
28	Cottonwood	7	17,431	2,812	0.40	25	3.74
29	Kearns	9	20,381	2,370	0.34	24	2.62
30	Taylorsville	4	11,135	3,275	0.35	10	2.83
31	Murray	4	16,896	4,023	0.58	12	2.77
32	Midvale	3	8,816	2,939	0.34	7	2.33
33	West Jordan No.	4	11,941	3,142	0.29	12	2.90
34	W. Jordan, Copperton	1	5,950	5,950	0.23	5	4.80
35	South Jordan	1	2,869	3,348	0.11	5	4.00

TABLE 24 CONTINUED

NUMBERS AND RATES OF HOSPITAL DISCHARGES, TOTAL AND AVERAGE HOSPITAL CHARGES, AND MEAN LENGTH OF STAY
BY SMALL AREAS, INPATIENT DISCHARGES FROM UTAH HOSPITALS:1992-96 (ANNUAL AVERAGE)

Gastroenteritis

Area of Residence		___HOSPITAL CHARGES (DOLLARS)___			___DAYS OF STAY___		
No.	Name	Annual # of Discharges	Annual Charges	Average Charges per Patient	Per Capita Charges	Annual Total	Average per Patient
36	Sandy Center	4	9,504	2,263	0.19	8	2.00
37	Sandy, NE	2	12,475	5,670	0.45	9	3.91
38	Sandy, SE	2	8,346	4,173	0.27	7	3.40
39	Riverton/Draper	3	10,805	3,550	0.33	10	3.14
40	Tooele Co.	7	27,999	4,000	0.97	25	3.50
41	Lehi/Cedar Valley	3	6,431	1,892	0.48	7	2.06
42	American Fork/Alpine	5	10,252	1,898	0.33	10	1.93
43	Pleasant Grove/Lindon	7	13,703	2,015	0.58	14	2.09
44	North Orem	8	19,828	2,418	0.62	19	2.27
45	West Orem	2	5,680	2,610	0.23	5	2.40
46	East Orem	0	.	.	.	.	.
47	Provo/BYU	3	7,812	2,298	0.17	8	2.35
48	Provo South	5	13,146	2,434	0.29	14	2.52
49	Springville/Spanish Fork	14	33,351	2,382	0.81	31	2.18
50	Utah Co. South	10	23,382	2,487	1.27	23	2.44
51	Summit Co.	2	8,350	3,796	0.39	6	3.10
52	Wasatch Co.	5	9,583	1,917	0.83	10	1.88
53	Tri-county LHD	11	26,804	2,577	0.71	25	2.38
54	Juab/Millard/Sanpete Co.	13	26,469	2,068	0.72	30	2.31
55	Sevier/Piute/Wayne Co.	9	27,734	3,015	1.36	22	2.50
56	Carbon/Emery Co.	11	30,216	2,62450	0.98	24	2.13
57	Grand/San Juan Co.	12	21,031	1,782	1.04	29	2.49
58	St. George	13	44,351	3,310	1.03	45	3.33
59	Other Washington Co.	6	19,442	3,136	0.82	18	2.97
60	Cedar City	6	17,404	3,001	0.80	13	2.17
61	Other Southwest Dist	22	41,859	1,975	2.29	51	2.36

SOURCE: Utah Hospital Discharge Database, 1992-96, Utah Department of Health.

Note: Local Health Districts are Defined by Patients' Residential Zip Codes.

Appendix A: Data and Methodology

Data

The primary source of data for this report was the Utah Hospital Inpatient Discharge Data, 1992-96 file. Obstetric admissions, discharges for which the source of admission was newborn, were excluded from these analyses. After these exclusions, a total of 807,148 hospital inpatient discharges of Utah residents occurred during 1992 and 1996 and are included in this analysis. Of those, 86,633 were hospitalized due to the diseases and conditions reported in this document.

The population estimates, used as denominators in calculating the rates, were obtained from CACI Marketing Inc.

Methodology

Selection of Conditions:

This report was prepared using the same 12 conditions called Ambulatory Care Sensitive Condition (ACS) as defined in Appendix B. The conditions included were based on those used in two prior studies in New York City¹ and Massachusetts and Maryland.² Rates were computed for each ACS condition based on those discharges for which one of the ICD-9 codes designated that condition as the first listed diagnosis. After calculation of rates and examining the results, only the 12 most common conditions were included because limited precision made the results unreliable for the remaining conditions. In addition, only the overall group, diabetes, was used since the numbers of events were too small for the two subgroups of diabetes hospitalization.

Computation of Rates:

Rates were computed for inpatient discharges from Utah hospitals by first diagnosis at state and small area levels. Discharges were assigned to the small area of the patient's residence not the small area in which the hospital was located. Crude rates were calculated as the number of discharges divided by the population of the corresponding geographic area multiplied by the constant (10,000). Age adjusted rates were computed by direct adjustment using the U.S. 2000 population as standard. The following formula was used to compute adjusted (standardized) rates:

Directly Standardized Rate (DSR) = {Sum of (age-specific hospitalization rate in source pop x Pop count in standard population in each age group)} ÷ Total standard population x 10,000

or

$$DSR = (\sum m_i * P_i) / P * 10,000$$

Where $m_i = (d_i / p_i)$;

d_i = number of discharges for the condition in question at each age group in the source population (e.g. Logan).

p_i = population count for each age group in the source population (e.g. Logan).

P_i = population count for the standard population (U.S. 2000) at each age group.

$P = \sum P_i$ = total standard population.

Age-adjustment was based on ten age categories, namely, 0-4, 5-14, 15-24, 25-34, 35-44, 45-54, 55-64, 65-74, 75-84 and ≥ 85 .

Confidence Interval for Directly Standardized rates:⁹

$$\text{Confidence Interval} = \text{DSR} \pm 1.96 \text{ SE}(\text{DSR})$$

Where:

$$\text{SE}(\text{DSR}) = \text{SQRT}(\text{Var}(\text{DSR}))$$

$$\text{Variance}(\text{DSR}) = \sum W_i^2 * \text{Var}(m_i)$$

$W_i = (P_i / P) = (\text{standard population count for the } i\text{th age group} \div \text{total standard population}) = \text{the population weight for the } i\text{th age group in the standard population.}$

and $\text{Var}(m_i) = \{m_i * (1 - m_i)\} / p_i$

Where:

$m_i = \text{the age specific rate for the } i\text{th age group in the source population (each small area)}$

$p_i = \text{population count for the } i\text{th age group in the source population.}$

Thus $\text{SE}(\text{DSR}) = \sqrt{(\sum W_i^2 * (\{m_i * (1 - m_i)\} / p_i))}$

For directly standardized rates based on events that follow Poisson distribution, the lower and upper confidence limits of the 95% confidence interval are³:

$$\text{LCL}(\text{DSR}) = (\text{DSR} - 1.96 * \text{SE}(\text{DSR})) * K$$

$$\text{UCL}(\text{DSR}) = (\text{DSR} + 1.96 * \text{SE}(\text{DSR})) * K$$

where $K = \text{constant (10,000 in this report)}$

Computation of the Estimates of Excess Hospital Discharges and Excess Hospital Charges

Although the hospitalizations studied here are called “preventable,” not all are preventable even in the best of all possible health care systems. To help understand the importance of the health care system issues that cause increased rates of these hospitalizations, we estimated the number of discharges that might reasonably be prevented by improving the health care system. Individual level clinical information that would allow us to identify those hospitalizations that could have been prevented was not available. Therefore, we assumed that areas with low rates are doing something right that could also be achieved elsewhere. We chose the area that marked the (3rd) quartile, that is the area for which the rate was lower than 75% of all areas (and higher than 25% of areas) as a target rate that all areas should be able to achieve with appropriate changes in the provision of ambulatory care. Any area with a rate higher than the lowest quartile was considered to have some hospitalizations that were preventable.

The following steps were followed to compute the excess hospitalizations and excess cost:

1. Compute the age standardized rates for the small areas as stated in an earlier section in this appendix.
2. Take the rate for the lowest quartile area (1st quartile if observations are arranged by ascending order or 3rd quartile if observations are arranged by descending order). Quartiles are values which divide the distribution of rates into four equal parts.

Note: The 3rd quartile is the observation number $(3n/4)$ if the answer is an integer; otherwise it is observation number $([3n/4] + 1)$. In our analysis $n=61$, therefore $(3n/4)=45.75$ which is not an integer. Therefore the third quartile in our analysis was the 46th observation after areas were arranged in descending order.

3. Calculate the **expected number** of hospital admissions for each condition for a small area as follows:

$(\text{Standardized Quartile rate} / \text{Standardized small area rate}) * \text{Actual number}$ (or observed number) of hospital admissions for the small area.

4. Compute the “excess hospital discharges” for each condition for small areas by subtracting expected number of admissions from actual (i.e., observed) number. The state total of excess discharges was calculated by adding the number of excess discharges for all small areas.

5. Compute the “excess hospital charges” for each condition in each small area by multiplying excess hospital discharges for a certain condition for each small area by the average hospital charges for that condition in corresponding small area. Compute the state total of excess charges by adding the excess charges for individual small areas.

Appendix B: Classification of Diseases/Conditions

The International Classification of Diseases, Ninth Revision, Clinical Modification (ICD-9-CM) codes were used to identify the specific disease categories in this report. They are listed below.

Disease Classification	ICD-9 Codes
Conditions included in this report	
Bacterial pneumonia	481, 482, 483, 485, 486
Congestive heart failure	428, 402.01, 402.11, 402.91 exclude cases with surgical procedures 35, 36, 37.5-37.8
Diabetes	250
Asthma	493
Dehydration	276.5
Pyelonephritis/Urinary infection	590, 599.0
Perforated or bleeding ulcer	531.0, 531.1, 531.2, 531.4, 531.5, 531.6, 532.0, 532.1, 532.2 532.4, 532.5, 532.6, 533.0, 533.1, 533.2, 533.4, 533.5, 533.6
Angina	411.1, 411.8, 413 exclude if any procedures 1-86.99
Cellulitis	681, 682, 683, 686 exclude procedures 1-86.99, except procedure 86.0 (if only procedure)
Chronic obstructive pulmonary disease	491, 492, 494, 496, 466.0 466.0, only if a secondary diag. 491, 492, 494, or 496
Appendicitis with rupture	540.0, 540.1
Gastroenteritis	558.9

Appendix C: Interpretation of Small Numbers

For many of the small areas in Utah, this report is based on very small numbers of inpatient hospital discharges for some conditions. It is important to remember that rates based on small numbers of events are unstable. In common language this means that they will vary from year to year even if nothing else changes. Therefore it is important not to overreact to a rate that is higher or lower than expected.

How much are they likely to vary? Put another way, how much higher or lower than expected must a rate be before we can be sure that it really is high or low? Epidemiologists and statisticians often use a confidence interval to help answer that question. For these data, a confidence interval can be thought of as indicating the amount that the rate can be expected to vary from year-to-year due to chance alone. For example, the 95% confidence interval for the age adjusted rate of 26.8 hospital discharges per 10,000 persons based on 46 hospital discharges (for a small area with population of 18,915 persons) would be from 19.0 to 34.6 per 10,000. If the Utah rate for that condition was within the confidence interval (19.0-34.6), then the rate would not be significantly different. On the other hand, if the Utah rate was outside the confidence interval, the rate would be significantly different. However, deciding that the rates are not significantly different does not mean that the observed difference is not important. It means that we cannot be sure that chance alone did not cause the difference. It does not tell us that the difference was caused by chance.

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